
BULLETIN

OF

MISCELLANEOUS INFORMATION.

APPENDIX III.—1915.

NEW GARDEN PLANTS OF THE YEAR 1914.

The number of garden plants annually described in botanical and horticultural publications, both English and foreign, is now so considerable that it has been thought desirable to publish a complete list of them in the *Kew Bulletin* each year. The following list comprises all the new introductions recorded during 1914. These lists are indispensable to the maintenance of a correct nomenclature, especially in the smaller botanical establishments in correspondence with Kew, which are, as a rule, only scantily provided with horticultural periodicals. Such a list will also afford information respecting new plants under cultivation at this establishment, many of which will be distributed from it in the regular course of exchange with other botanic gardens.

The present list includes not only plants brought into cultivation for the first time during 1914, but the most noteworthy of those which have been re-introduced after being lost from cultivation. Other plants included in the list may have been in gardens for several years, but either were not described or their names had not been authenticated until recently.

In addition to species and well-marked varieties, hybrids, whether introduced or of garden origin, have been included where they have been described with formal botanical names. Mere cultural forms of well-known garden plants are omitted, for obvious reasons.

In every case the plant is cited under its published name, although some of the names are doubtfully correct. Where, however, a correction has appeared desirable, this is made.

The name of the person in whose collection the plant was first noticed or described is given where known.

An asterisk is prefixed to all those plants of which examples are in cultivation at Kew.

The publications from which this list is compiled, with the abbreviations used to indicate them, are as follows:—*Bean*, T. & S.—W. J. Bean, Trees and Shrubs hardy in the British Isles. B.M.—

Botanical Magazine. *B. M. H. N.*—Bulletin du Muséum d'Histoire Naturelle, Paris. *B. S. D. F.*—Bulletin de la Société Dendrologique de France. *B. T. O.*—Buletino della R. Società Toscana di Orticoltura. *Gard.*—The Garden. *G. C.*—Gardeners' Chronicle. *Gfl.*—Gartenflora. *G. M.*—Gardeners' Magazine. *Haage & Schmidt, Cat.*—Haage & Schmidt, Haupt-Verzeichniss über Samen und Pflanzen. *Jard.*—Le Jardin. *J. of H.*—Journal of Horticulture. *J. H. F.*—Journal de la Société Nationale d'Horticulture de France. *J. R. H. S.*—Journal of the Royal Horticultural Society. *K. B.*—Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew. *Lemoine, Cat.*—Lemoine, Catalogue. *M. G. Z.*—Möllers Deutsche Gärtner-Zeitung. *M. K.*—Monatsschrift für Kakteenkunde. *N. B. G. Edinb.*—Notes from the Royal Botanic Garden, Edinburgh. *O. R.*—Orchid Review. *Orchis.*—Orchis. Beilage zur Gartenflora. *O. W.*—The Orchid World. *Pl. Wils.*—Plantae Wilsonianae, edited by C. S. Sargent. *R. H.*—Revue Horticole. *R. H. B.*—Revue de l'Horticulture Belge. *T. H.*—La Tribune Horticole.

The abbreviations in the descriptions of the plants are:—*diam.*—Diameter. *ft.*—Foot or Feet. *G.*—Greenhouse. *H.*—Hardy. *H.H.*—Half-hardy. *in.*—Inches. *S.*—Stove.

***Abelia Engleriana.** (*Bean, T. & S. i.* 114.) Caprifoliaceae. *H.* A deciduous shrub 2-4 ft. high. Leaves oval-lanceolate, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long, $\frac{1}{4}$ - $\frac{1}{2}$ in. broad, bristly hairy on the margin; petiole $\frac{1}{2}$ in. long or less. Flowers usually in pairs at the end of short lateral branches. Corolla funnel-shaped, $\frac{5}{8}$ in. long, rose-coloured. Central China. (Arnold Arboretum.)

***Abelia grandiflora.** (*Bean, T. & S. i.* 115.) *H.* Hybrid between *A. chinensis* and *A. uniflora*. Syn. *A. chinensis*, *Hort.*, not of R. Brown. (Kew.)

Acanthopanax setchuenense. (*Bean, T. & S. i.* 132.) Araliaceae. *H.* Distinct in being glabrous in every part and in having trifoliolate leaves. It is a deciduous shrub or small tree. Leaflets oblong to ovate, 2-5 $\frac{1}{2}$ in. long, 1-2 in. broad. Flowers in a panicle 5-7 in. long, consisting of about 6 spherical umbels 1-1 $\frac{1}{2}$ in. across. Fruits black. Western China. (J. Veitch & Sons.)

***Acer rotundilobum.** (*Bean, T. & S. i.* 157.) Sapindaceae. *H.* Probably a hybrid between *A. monopessulanum* and *A. Opalus*, var. *obtusatum*. It has been cultivated in Europe for more than half a century.

***Acer Saccharum**, var. *Rugelii*. (*Bean, T. & S. i.* 158.) *H.* Leaves thin, 3-lobed, rather glaucous and downy beneath; lobes usually entire, triangular, pointed. South-Eastern United States. (Kew.)

Adenophora Watsoni. (*N. B. G. Edinb.* viii. 175.) Campanulaceae. *H.* A new species easily distinguished from its allies by its broadly obovate truncate leaves. Plant erect, robust, up to 2 ft. high. Leaves almost sessile, 1 $\frac{1}{2}$ -1 $\frac{3}{4}$ in. long. Corolla funnel-shaped, $\frac{3}{4}$ -1 in. long, blue. Western China. (Edinburgh B. G.)

Adiantum gloriosum Lemkesii. (*G. C.* 1914, lv. 364; *G. M.* 1914, 434.) Filices. *S.* An elegant fern, said to have been derived from *A. scutum roseum*. It closely resembles *A. farleyense gloriosum*. The young pale green fronds are suffused with salmon-rose. (Lemkes & Sons, Alphen, Holland.)

***Aerides Houlettianum Sanderæ.** (*G. C.* 1914, lvi. 15.) Orchidaceae. *S.* Practically an albino form. Flowers creamy-white, with a yellow tint on the sepals and petals. (F. Sander and Sons.)

***Aesculus austrina.** (*Bean, T. & S. i.* 166.) Sapindaceae. *H.* This has probably been a long time in cultivation under the name of *A. Pavia*. It resembles this species, but is very distinct in the white down covering the leaves beneath and in the usually shorter calyx. South-eastern United States.

***Aesculus chinensis.** (*Pl. Wils.* i. 499; *K. B.* 1914, 50.) A large tree of rounded form, 80-90 ft. high. Leaves 5-7-foliate; leaflets nar-

rowly obovate to narrowly oval, up to $7\frac{1}{2}$ in. long and $2\frac{1}{2}$ in. broad. Panicles up to 14 in. long and $3\frac{1}{2}$ in. broad at the base. Flowers white, $\frac{1}{2}$ - $\frac{3}{4}$ in. broad. The plant usually met with in cultivation as *A. chinensis* is *A. turbinata*. North China. (Arnold Arboretum.)

***Aesculus Wilsonii.** (*Pl. Wils.* i. 498; *Bean, T. & S.* i. 169; *K. B.* 1914, 50.) *H.* Very closely allied to *A. chinensis* from which it may be distinguished by the following characters: Leaflets with longer petioles, usually not so tapering at the base, but rounded or slightly cordate, more downy at first, and with more numerous pairs of veins. Fruit ovoid or pear-shaped, bearing an apical mucro, seed larger. The panicle is sometimes 16 in. long and 4 in. across at the base. Central China. (Arnold Arboretum.)

***Amelanchier rubescens.** (*Bean, T. & S.* i. 190.) *Rosaceae.* *H.* A shrub with downy branchlets. Leaves orbicular or broadly obovate, $\frac{1}{2}$ -in. long, glaucous and covered with a fine close down beneath, sharply toothed. Flowers pure white, $\frac{1}{2}$ - $\frac{3}{4}$ in. across, 3 to 6 together in a short raceme. South - western United States. (Kew.)

***Anemone rupicola.** (*G. M.* 1914, 642 f.) *Ranunculaceae.* *H.* Root-stock long, slender, woody. Leaves long-stalked, 3-partite; segments sharply and coarsely toothed or 3-lobed. Scape 12 in. long. Involucral leaves almost sessile, 3-lobed to the middle, with toothed and cut segments. Flowers showy, white, 1-2 in. across. A re-introduction. See *Hook. f. Fl. Brit. Ind.* i. 8. Himalaya. (Bees, Ltd.)

***Angraecum birrimense.** (*K. B.* 1914, 214.) *Orchidaceae.* *S.* Flowers smaller than in *A. Eichlerianum*, with narrower lip and a straight spur. The flowers are showy and have subspreading linear-lanceolate sepals and petals $1\frac{1}{4}$ - $1\frac{1}{2}$ in. long. Lip obovate, 1 in. long and broad. Gold Coast. (Kew.)

Aquilegia desertorum. (*G. C.* 1914, lv. 67.) *Ranunculaceae.* *H.* "A dwarf species with red flowers of the type of *A. canadensis*, and with an enormous root." New Mexico. (T. D. A. Cockerell, Boulder, Colorado, U.S.A.)

***Aristolochia gigantea.** (*B. M. t.* 8542.) *Aristolochiaceae.* *S.* This is the true *A. gigantea*. The plant

figured in *B. M. t.* 4221 under that name is *A. grandiflora* var. *Hookeri*; in that the apex of the large perianth-limb is long-tailed, while in *A. gigantea* it is obtuse. Perianth-limb elliptic, deeply cordate, 9 in. long, $6\frac{1}{2}$ in. broad, brownish-purple with pale yellow reticulations. Its flowers are fragrant. Brazil. (Sir Frank Crisp.)

Arundina subseisilis. (*K. B.* 1914, 374.) *Orchidaceae.* *S.* A completely herbaceous species easily distinguished by having the flowers subsessile at the apex of the branches. The flowers are nearly white, with purple at the tips of the sepals and petals and on the limb of the lip, and yellow keels. Upper Burma. (H. J. Elwes.)

***Aster batangensis.** (*G. C.* 1914, lvi. 186, f. 74.) *Compositae.* *H.* A compact little shrubby plant about 1 ft. high, very free-flowering. Flower-heads bright purple, $1\frac{1}{2}$ in. across; ray-florets longer and narrower than is usual in the genus. It flowers in May and June. Western China. (Bees, Ltd.)

***Begonia Bunchii.** (*Haage & Schmidt, Cat.* 1914, 211, name only.) *Begoniaceae.* *G.* Very similar to *B. metallica* var. *crispa*. Leaves reniform, up to $3\frac{1}{2}$ in. long and 6 in. broad, lobed, undulate and crisped on the margin, shining yellowish-green and glabrous above, rose-purple beneath, and very sparingly furnished with brown chaffy hairs on the principal veins, ciliate and with tufts of brown hairs here and there on the margin; petiole up to $4\frac{1}{2}$ in. long, sparingly clothed with long slender chaffy hairs. Inflorescence a lax cyme. Peduncle erect, about 5 in. long. Flowers (all female in Kew plant) pale rose. Perianth-segments 2, suborbicular, about $\frac{1}{2}$ in. across. Fruit rather broadly and subequally 3-winged. (Haage & Schmidt, Erfurt.)

***Begonia lophoptera.** (*K. B.* 1914, 28.) *G.* A new species differing from *B. ciliata* in its larger leaves and bracts, in having vivid scarlet flowers, and a capsule of which the upper wing terminates in a thickened toothed and pilose crest. Only the male flowers are known. These have 2 segments which are broadly elliptic and $5\frac{1}{2}$ in. long. Peru. (F. Sander & Sons.)

Begonia venusta. (*R. H.* 1914, 134; *Lemoine, Cat.* 1914, n. 187, 3.) *G.* Garden hybrid between *B. decora*

and *B. Bowringiana*. (V. Lemoine & Son, Nancy.)

***Berberis Prattii**. (*B. M. t.* 8549.) Berberidaceae. H. Belongs to the same group as *B. polyantha* and *B. brevipaniculata*, differing from the former chiefly in its narrower panicles, and from the latter in its larger serrate leaves, which are not glaucous beneath. It is a shrub of dense growth, with obovate-oblong or obovate leaves, $\frac{3}{4}$ –1 $\frac{1}{2}$ in. long, narrow panicles of yellow flowers, and ellipsoid salmon-red berries, which are very freely produced. Western China. (J. Veitch & Sons.)

***Berberis yunnanensis**. (*Bean, T. & S. i.* 253.) H. A deciduous shrub 3–6 ft. high, with a dense rounded habit. Leaves obovate, sometimes almost orbicular, $\frac{3}{4}$ –1 $\frac{1}{2}$ in. long, $\frac{1}{2}$ –1 in. broad, mostly entire. Flowers 3 to 8 in a cluster, pale yellow, $\frac{3}{4}$ in. across. Berries oval, bright red, $\frac{1}{2}$ in. long. South-Western China. (M. L. de Vilmorin, Les Barres, France.) [The plant included in the 1908 list as *B. yunnanensis* (*B. M. t.* 8224) is *B. diaphana*, Maxim.]

Berchemia flavescens. (*Bean, T. & S. i.* 253.) Rhamnaceae. H. A climbing deciduous shrub. Leaves 2–6 in long, 1–2 $\frac{1}{2}$ in. broad, rounded or broadly tapered at the base, narrowed at the apex. Flowers white, $\frac{1}{2}$ in. across, produced in pyramidal panicles 1 $\frac{1}{2}$ –4 in. long. Himalaya, Tibet, and Western China. (J. Veitch & Sons.)

***Betula alaskana**. (*Bean, T. & S. i.* 255.) Cupuliferae. H. A tree 30–40 ft. high. Young shoots thickly covered with viscid warts, glabrous. Leaves triangular-ovate, acuminate, 1 $\frac{1}{2}$ –3 in. long, 1–2 in. broad, coarsely and often doubly toothed; petiole $\frac{3}{4}$ –1 in. long, reddish. Fruiting catkins 1–1 $\frac{1}{2}$ in. long. Alaska. (Arnold Arboretum.)

***Betula fontinalis**. (*Bean, T. & S. i.* 257.) H. A shrub 15–20 ft. high, or occasionally a tree; bark almost black, not peeling; young shoots resinous, warted. Leaves glandular, broadly ovate, rounded or slightly cordate at the base, pointed, double-toothed, 1–2 in. long, $\frac{3}{4}$ –1 $\frac{1}{2}$ in. broad; petiole $\frac{1}{2}$ – $\frac{3}{4}$ in. long. Male catkins up to 2 in. long. Fruiting catkins 1–1 $\frac{1}{2}$ long. Western North America. (Arnold Arboretum.)

***Betula kenaica**. (*Bean, T. & S. i.* 261.) H. Differs from *B. papyrifera* in the fruit-scales being hairy on the

margin, and in the smaller leaves. Syn. *B. papyrifera*, var. *kenaica*, Henry. Alaska. (Kew.)

***Betula Wilsonii**. (*K. B.* 1914, 30.) H. A distinct new species, 6–10 ft. high, remarkable on account of its many-nerved hirsute leaves. These are ovate, $\frac{3}{4}$ –2 $\frac{1}{2}$ in. long, with 12–22 parallel nerves on each side of the midrib. Western China. (Arnold Arboretum; Kew.)

Bomarea Banksii. (*G. C.* 1914, lv. 390, f. 176.) Amaryllidaceae. G. Garden hybrid between *B. Caldasiana* and *B. patacocensis*. (Cambridge B. G.)

***Brachystelma linearifolium**. (*K. B.* 1914, 248.) Asclepiadaceae. S. A perennial herb with a tuberous rhizome. Stem erect, branched below, 5 in. high. Leaves numerous, linear, up to 3 $\frac{1}{2}$ in. long. Flowers axillary, solitary. Corolla purple; tube very short; lobes spreading, linear-oblong, about $\frac{3}{4}$ in. long. Rhodesia. (Kew.)

Brasso-cattaleia pervenusta. (*O. W.* iv. 208.) Orchidaceae. G. Garden hybrid between *Laelio-cattleya blechleyensis* and *Brassavola Digbyana*. (Charlesworth & Co.)

Brasso-cattleya Massangeana. (*O. W.* iv. 162.) Orchidaceae. G. Garden hybrid between *Cattleya Trianae* and *B.-c. Mrs. Leemann*. (T. Pauwels, Meirelbeke, Ghent.)

Brasso-cattleya pervenusta. (*O. W.* iv. 208.) G. Garden hybrid between *Brassavola Digbyana* and *Cattleya Fabia*. (F. Sander & Sons.)

Brasso-cattleya Rex. (*O. R.* 1914, 214; *O. W.* iv. 235.) G. Garden hybrid between *Cattleya Rex* and *Brassavola Digbyana*. (W. P. Burkinshaw.)

Brasso-cattleya sulphurea. (*O. R.* 1914, 368; *O. W.* v. 57.) G. Garden hybrid between *Cattleya Gaskelliana alba* and *B.-c. Mrs. Leemann*. (R. Ashworth.)

***Brittonastrum lonocalyx**. (*G. C.* 1914, lvi. 109, f. 47.) Labiatae. H. or H. H. An erect much-branched herb up to 3 ft. high, having some resemblance to *Cedronella cana*. Leaves deltoid-ovate, cordate at the base, 1 $\frac{1}{2}$ –2 $\frac{1}{2}$ in. long, 1–2 in. broad, crenate, purplish beneath when young. Inflorescences terminal, 4–7 in. long, bearing 8 to 14 crowded whorls of rose-pink flowers about 1 in. long. Mexico. (Edinburgh B. G.)

***Buddleia variabilis**, var. **Wilsonii**. (*G. C.* 1904, xxxvi. 155; *Bean, T. & S. i.* 274.) Loganiaceae. H. Flowers rosylilac, with a deep orange centre. Corolla-lobes erect. Central China. (J. Veitch & Sons.)

Bulbophyllum amplebracteatum. (*O. R.* 1914, 199.) Orchidaceae. S. Allied to *B. orthoglossum*. It has a similar spike, with compressed bracts and 2 or 3 flowers, but the petals are much more acuminate, and the lip suddenly narrows below the middle and is prolonged in a recurved tail-like appendage. Malay Archipelago. (F. Sander & Sons.)

***Bulbophyllum elatius**. (*O. R.* 1914, 298.) S. Plant without pseudobulbs. Leaves erect, oblong, leathery, 9-12 in. long, narrowed at the base into a stout petiole 4-5 in. long. Scapes basal, about as long as the leaves, bearing a narrow spike crowded with white flowers. Borneo and Sumatra. (F. Sander & Sons.)

***Bulbophyllum Fletcherianum**. (*G. C.* 1914, lv. 320, f. 142; *O. R.* 1914, 164.) S. Pseudobulbs oblong, $\frac{3}{4}$ -2 $\frac{1}{4}$ in. across, 1-leaved, transversely wrinkled and streaked with purple lines. Leaves elliptic or oblong, pendulous, nearly 1 ft. long, purplish-green. Flowers in a cluster of about 7, dull lurid purple, with whitish splashes, very large for the genus. Lateral sepals acuminate, about 4 in. long; dorsal sepal about half as long. Lip broad and fleshy. New Guinea. (Rev. J. C. B. Fletcher.) [*Cirrhopetalum Fletcherianum*; *B. M. t.* 8600.]

Bulbophyllum rigidum. (*O. R.* 1914, 315.) S. Plant without pseudobulbs. Leaves erect, 6-10 in. long, narrowed to the petiole. Scapes nearly as long as the leaves. Inflorescence racemose, lax. Flowers brownish-yellow or greenish, with a few brown streaks at the base. Allied to *B. apodum*, and is the same as *B. conchiferum*, Hook. f., but not of Reichenbach. It was in cultivation in 1894. (Sikkim Himalaya.) (F. Sander & Sons.)

Buxus microphylla, var. **sinica**. (*Pl. Wils. ii.* 165.) Euphorbiaceae. H. Distinguished from the type by its pubescent branches and larger leaves. It has been met with in cultivation in America under the name of *B. Fortunei*, but it is distinct from *B. Fortunei*, Carr. (China.)

Calanthe Branchii. (*G. C.* 1914, lvi. 342; *L.c.* 357, as *C. Brianchii*; *L.c.* 391, as *C. Brianchii*; *O. R.* 1914,

366.) Orchidaceae. G. Garden hybrid between *C. Textori* and *C. Wm. Murray*. (C. J. Lucas.)

***Calanthe kewensis**. (*O. R.* 1914, 31.) S. Garden hybrid between *C. Veitchii* and *C. rubens*. (Kew.)

***Calceolaria angustifolia x plantaginea**. (*G. C.* 1914, lv. 319.) Scrophulariaceae. G. Garden hybrid. (John Innes Hort. Inst.)

***Calceolaria Ballii**. (*G. C.* 1914, lv. 102, f. 46.) G. Garden hybrid between *C. deflexa* and *C. Forgetii*. (Glasnevin B.G.)

***Campanula cenisia alba**. (*G. C.* 1914, lv. 287; *G. M.* 1914, 351.) Campanulaceae. H. A form with pure white flowers. (R. Tucker & Sons.)

***Campanula Hohenackeri**. (*G. C.* 1914, lv. 425; *G. M.* 1914, 478, 495, f.) H. A very free-flowering biennial or perennial. Leaves lanceolate. Inflorescences $1\frac{1}{2}$ -2 $\frac{1}{2}$ ft. high, semi-erect. Flowers elongated-campanulate, sky-blue, pendulous on slender branches. Caucasus, Armenia, etc. (Piper & Sons.) [*C. sibirica*, L., var. *major*, Boiss.]

Catasetum Pflanzii. (*Orchis*, 1914, 18.) Orchidaceae. S. Plant up to 18 in. high. Pseudobulbs cylindric, about 5 in. long when mature, 4-5 leaved. Leaves elliptic, acuminate, about 1 ft. long, 2 $\frac{1}{2}$ -3 in. broad in the middle. Racemes basal, loosely about 6-flowered. Peduncles 5 in. long. Male flowers similar to those of *C. atratum*. Sepals and petals about 1 $\frac{1}{2}$ in. long, green-yellow with red dots. Lip yellow. Female flowers not described. See *Fedde, Repertorium* xi. 45. Bolivia. (P. Wrede.)

Cattleya ardens. (*J. H. F.* 1914, 384.) Orchidaceae. G. Garden hybrid between *Laelio-cattleya Oanhiana* and *Cattleya Mossiae* Quo Vadis. (E. Bert & Son, Bois-Colombes, Seine, France.)

Cattleya birex. (*G. C.* 1914, lvi. 319.) G. Garden hybrid between *C. bicolor* and *C. Rex*. (C. J. Lucas.)

Cattleya Gravesiana. (*G. C.* 1914, lv. 294.) G. Garden hybrid between *C. Mossiae* and *C. Ludde-manniana*. (F. Sander & Sons.)

Cattleya Hardyana rubens. (*G. C.* 1914, lvi. 99; *O. R.* 1914, 248.) G. Sepals and petals light rose. Lip

large, ruby-crimson, with much yellow in the throat and a narrow lilac-tinted margin. (J. Gurney Fowler.)

Cattleya Leopoldii alba. (*O. R.* 1914, 302; *O. W.* v. 2.) G. Sepals and petals light green, without any spots. Lip pure white. (F. Sander & Sons.)

Cattleya Maronis. (*O. W.* v. 40.) G. Garden hybrid between *C. Maronii* and *C. Iris*. (Armstrong & Brown.)

Cattleya venusta. (*O. W.* v. 15.) G. Garden hybrid between *C. Armstrongiae* and *C. intricata*. (H. T. Pitt.)

***Centaurea moschata rosea.** (*Haage & Schmidt, Cat.* 1914, 195, f.) Compositae. H. A form in which the flowers are at first reddish-white, with pale rose filaments and styles; after a few days the colour changes to a delicate rose. (Haage & Schmidt, Erfurt.)

Cephalotaxus drupacea, var *sinensis*, f. *globosa*. (*Pl. Wils.* ii. 4.) Coniferae. H. In this form the fruit is globose or subglobose. The var. *sinensis* differs from the type in having narrowly lanceolate leaves tapering to a sharp acuminate point. Central China. (Arnold Arboretum.)

***Ceratostigma Willmottianum.** (*B. M.* t. 8591.) Plumbaginaceae. H. A new species closely resembling *C. plumbaginoides* but the leaves are hispidly hairy on both sides and on the margin, the flowers are of rather a paler blue, and the anthers are scarcely exerted. It is a shrub growing 5 ft. high or more. Western China. (Miss Willmott.)

***Cercis racemosa.** (*J. R. H. S.* xl. 223; *Bean, T. & S.* i. 335.) Leguminosae. H. Differs from the Judas Tree in having its flowers in short racemes instead of in close clusters, and it may be distinguished from all the other species of the genus by its very downy leaves and young shoots. The racemes are up to 4 in. long, with 30 to 40 rose-coloured flowers. Central China. (Arnold Arboretum; Kew.)

Cereus Martinii, var. *perviridis*. (*M. K.* 1914, 72.) Cactaceae. G. More slender in growth than the type, the branches are quite terete and are uniformly light green, and the flowers, which have a pleasant odour, remain open almost twice as

long. Possibly a natural hybrid of which *C. Martinii* is a parent. Paraguay. (Haage & Schmidt, Erfurt.)

Cheiranthus linifolius. See *Erysimum linifolium*.

Chionanthus Duclouxii. (*B. S. D. F.* 1914, 72, f.) Oleaceae. H. A shrub. Leaves $3\frac{1}{2}$ -4 in. long, $2\frac{1}{2}$ in. broad, shortly lanceolate and obtuse or ovate and acuminate, densely and acutely serrate, coriaceous, dull green above, pale beneath, pubescent on the nerves; petiole short, purple. Flowers not described. Fruits not appreciably different from those of *C. virginica*. Yunnan, China. (R. Hickel, Versailles.)

Cirrhopetalum Fletcherianum. See *Bulbophyllum Fletcherianum*.

***Cirrhopetalum formosanum.** (*K. B.* 1914, 372.) Orchidaceae. S. Differs from *C. elatum* in having broader leaves, shorter scapes, only about $3\frac{1}{2}$ in. long and usually 2-flowered, and longer lateral sepals. The flowers are straw-yellow, with a deep yellow lip and a suffusion of pink in the petals. Formosa. (Kew.)

Cirrhopetalum Trimenii. (*G. C.* 1914, lv. 247.) S. A dwarf evergreen species. Scapes slender, about 3 in. high. Flowers 7-9 in a very short raceme, yellowish-white with purple spots on the back of the dorsal sepal. Lip primrose-yellow with a few rose-coloured dots at the base. Ceylon. (Hon. N. C. Rothschild.)

***Cleisostoma spicatum.** (*G. C.* 1914, lv. 20.) Orchidaceae. S. A strong-growing species with thick dark-green leaves 4-6 in. long and 1-2 in. broad. Inflorescence bearing more than 40 flowers; rachis decurved, stout. Flowers $\frac{1}{2}$ in. across. Sepals and petals red, with a thin yellow line up the middle of the petals and lateral sepals. Lip whitish, prolonged into spur $\frac{1}{2}$ in. long. Syn. *Saccolabium densiflorum*, Lindl. Malaya. (Hon. N. C. Rothschild.)

Clematis acutangula. (*Bean, T. & S.* i. 354.) Ranunculaceae. H. A deciduous climbing shrub. Stems slender, sharply angled, reddish-purple, very viscid when young. Leaves doubly pinnate, 6-9 in. long; leaflets ovate-lanceolate, 1-2 in. long, coarsely toothed or few-lobed. Racemes 1-3 in. long. Flowers bell-shaped, 1 in. broad, $\frac{1}{2}$ in. long, lilac. Sepals 4. Himalaya and China. (J. Veitch & Sons.)

***Clematis glauca**, var. **akebioides**. (Bean, T. & S. i. 364.) H. Nearly allied to *C. orientalis*, but both the type and the variety differ from it in having the sepals downy on the margins only. Flowers $1\frac{1}{2}$ – $1\frac{3}{4}$ in. across, deep orange-yellow. It is more vigorous than the type, and flowers late into October. Western China. (J. Veitch & Sons.)

Clematis Couriana, var. **Finetii**. (Pl. Wils. i. 339; G. C. 1914, lv. 373.) H. An autumn-flowering plant with large panicles of small white flowers. It differs from the type in the achenes, which are glabrous, dark brown, orbicular-ovoid and compressed. Central China. (Arnold Arboretum; Hon. Vicary Gibbs.)

Clematis montana superba. (G. C. 1914, lv. 287, f. 127; G. M. 1914, 370.) H. Flowers much larger than in the type, the largest being more than 3 in. across. (G. Jackman & Sons.)

***Clematis Rehderiana**. (K. B. 1914, 150; Bean, T. & S. i. 366.) H. This is a new name for the plant included in the list of 1910 as *C. nutans*.

Clematis Spooneri. (Pl. Wils. i. 334; J. R. H. S. xl. 223; Gard. 1914, 490.) H. A new species closely allied to *C. montana*, of which it has been regarded as a variety (*sericea*). It differs in its relatively thick leaves, which are densely covered with yellowish silky hairs, silky-hairy flowers, and in its densely pilose achenes. Western China. (Arnold Arboretum.)

***Clematis Veitchiana**. (K. B. 1914, 151; Bean, T. & S. i. 366.) H. The same as *C. nutans* var. *thyrsoides* in the list of 1913.

***Clematis verrieriensis**. (G. C. 1914, lv. 393, f. 179.) H. Garden hybrid between *C. chrysocoma* and *C. montana rubens*. (Vilmorin-Andrieux & Co., Verrières-le-Buisson, France.) [Syn. *C. verdrariensis*; R. H. 1914, 335; J. H. F. 1914, 385.]

Coelogyne annamensis. (K. B. 1914, 211.) Orchidaceae. S. Near *C. brunnea*, but it has fusiform pseudobulbs, smaller flowers, and an unequally 3-keeled lip. The flowers are about $1\frac{1}{2}$ in. long, with pale buff-yellow sepals and petals, and a rather darker lip, which has brown nerves on the side lobes, some orange-brown on the front lobe, and flesh-coloured keels. Annam. (Glasnevin B. G.)

***Coelogyne brachyptera**. (B. M. t. 8582.) S. An epiphyte with elongated somewhat 4-angled pseudobulbs $3\frac{1}{2}$ –6 in. long. Leaves elliptic-lanceolate, 5–6 in. long. Scapes terminal, erect. Racemes about 7-flowered. Flowers showy, greenish-yellow, with an orange-coloured disk on the lip. Sepals and petals 1– $1\frac{1}{2}$ in. long. Lip 3-lobed, about 1 in. long. A re-introduction; it was in cultivation in 1881. Burma. (Kew.)

***Coelogyne siamensis**. (K. B. 1914, 373.) S. Distinguished from *C. lentiginosa* by the larger flowers and the wart-like papillae of the keel of the lip. The sepals and petals are $1\frac{1}{2}$ – $1\frac{3}{4}$ in. long, pale green, and the lip 1 in. long, light yellow, with a broad dark brown margin to the side lobes and some brown streaks and dots on the disk. Siam. (Kew.)

Coleus splendidus. (R. H. 1914, 81, ff. 19–20.) Labiatae. G. A tuberous species. Stem usually simple at the base and branched a few inches from the soil, reaching about 2 ft. in height. Leaves variable in shape, generally linear, $2\frac{1}{2}$ –5 in. long, $\frac{1}{2}$ – $\frac{3}{4}$ in. broad, pubescent, toothed in the upper part. Racemes terminal, erect, 5–8 in. long, 2– $2\frac{1}{2}$ in. broad at the base. Flowers about $\frac{1}{2}$ in. long, deep violet-blue. French Guinea. (Paris B. G.)

***Columnnea Lemoinei**. (R. H. 1914, 134; Lemoine, Cat. 1914, n. 187, 3.) Gesneraceae. S. Garden hybrid between *C. magnifica* and *C. glabra*. (V. Lemoine & Son, Nancy.)

***Cornus sessilis**. (Bean, T. & S. i. 393.) Cornaceae. H. Tree 10–15 ft. high. Leaves shortly stalked, ovate, $1\frac{1}{2}$ –3 in. long. Flowers $\frac{1}{2}$ in. across, yellow, crowded in sessile umbels, which are at first enclosed by 4 ovate bracts $\frac{1}{2}$ in. long. North California. (Kew.)

***Cotoneaster acutifolia**, var. **villosula**. (Pl. Wils. i. 158; Bean, T. & S. i. 405.) Rosaceae. H. Easily distinguished from the type by the larger more acuminate more or less villous leaves, more densely pubescent calyx, and by the somewhat villous apex of the fruits. Central and Western China. (J. Veitch & Sons.)

***Cotoneaster hupehensis**. (Pl. Wils. i. 169; M. G. Z. 1914, 14.) H. Similar to *C. multiflora*, from which it may be distinguished by the densely tomentose lower surface of

the leaves and the villous inflorescence. It is very fine when in flower, and its red globose fruits are ornamental. Central China. (Arnold Arboretum.)

***Cotoneaster multiflora**, var. **calocarpa**. (*Pl. Wils.* i. 170; *M. G. Z.* 1914, 9, f. 2.) H. Differs from the type in the larger and comparatively narrow leaves, which are slightly hairy beneath, and in the larger fruits. Western China. (Arnold Arboretum.)

***Cotoneaster nitens**. (*Pl. Wils.* i. 156; *M. G. Z.* 1914, 7.) H. Nearest allied to *C. divaricata*, and characterised by its broadly oval to suborbicular leaves, usually 5-6 lin. long and $4\frac{1}{2}$ -5 $\frac{1}{2}$ lin. broad, shining green and glabrous above, and nearly so beneath, and by its nearly black fruits. Western China. (Arnold Arboretum.)

***Cotoneaster racemiflora**, var. **microcarpa**. (*Pl. Wils.* i. 169; *M. G. Z.* 1914, 14.) H. Easily distinguished from the typical form, better known as *C. nummularia*, by its small ovoid fruits, which are only about $\frac{1}{4}$ in. long and scarcely so broad. Western China. (Arnold Arboretum.)

***Cotoneaster salicifolia**, var. **floccosa**. (*Pl. Wils.* i. 173; *M. G. Z.* 1914, 14.) H. The correct name of the plant included in the list of 1913 as *C. salicifolia glaciosa*.

***Cotoneaster turbinata**. (*B. M. t.* 8546.) H. A new species differing from *C. pannosa* and its allies by its top-shaped fruit, and from the other species in cultivation by its flowering so late as July. It is a very vigorous shrub with oblanceolate or ovate-lanceolate leaves $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long, compact many-flowered inflorescences, and red fruits $\frac{1}{4}$ in. long. Central China. (M. L. de Vilmorin, Les Barres, France; Kew.)

***Cotyledon paraguayensis**. (*K. B.* 1914, 208.) *Crassulaceae*. G. Stem short, 5 lin. thick, glabrous. Leaves crowded, the upper in a rosette, sessile, cuneate-obovate, $1\frac{1}{2}$ -3 in. long. Peduncles axillary, 2 in. long. Corolla $\frac{3}{4}$ in. across; tube 2 lin. long, campanulate, pale green; lobes ovate-lanceolate, acute, white, $3\frac{1}{2}$ lin. long. Paraguay. (Kew.)

***Crassula clavata**. (*K. B.* 1914, 167.) *Crassulaceae*. G. Very distinct from all other species of the genus in having rhomboid-clubshaped leaves, sessile flowers in a head about $\frac{1}{4}$ in.

across, and petals with an oblong-ovoid fleshy appendage on the back at the apex. The very small flowers are white. South Africa. (Kew.)

***Crataegus brachyacantha**. (*Bean, T. & S.* i. 422.) *Rosaceae*. H. A short-spined species remarkable in having bright blue fruits. It is a deciduous tree with oval or ovate leaves 1-2 in. long, and small flowers the petals of which become orange-coloured with age. Introduced in 1900. Central United States.

***Crataegus Holmesiana**. (*Bean, T. & S.* i. 423.) H. Allied to *C. coccinea*, under which name it was probably in cultivation previous to 1901, when it was introduced as *C. Holmesiana*. The flower-stalks are smooth or nearly so, and the flowers have only 5 to 7 stamens. Eastern North America.

Crocus Thomasianus Weaveri. (*G. C.* 1914, lv. 153.) *Iridaceae*. H. "A distinct purple-red variety." (Wargrave Hardy Plant Nursery. [*Crocus sativus*, L., var.]

Cunninghamia Konishii. (*Bean, T. & S.* i. 441.) *Coniferae*. G. Very distinct from *C. sinensis*, the leaves being only $\frac{1}{4}$ - $\frac{1}{2}$ in. long and $\frac{1}{10}$ in. broad, linear-lanceolate and curved. Formosa. (H. Clinton Baker.)

Cymbidium amabile. (*G. C.* 1914, lv. 191; *O. W.* iv. 162.) *Orchidaceae*. G. Garden hybrid between *C. Lowii-Mastersii* and *C. insigne Sanderi*. (F. Sander & Sons.)

Cymbidium Coningsbyanum. (*G. C.* 1914, lv. 46; *O. W.* iv. 112, 117.) G. Garden hybrid between *C. grandiflorum* and *C. insigne*. (G. Hamilton-Smith.)

Cymbidium Cooperi. (*O. R.* 1914, 94.) G. Natural hybrid between *C. insigne* and *C. Schroederi*. (G. Hamilton-Smith. [The same hybrid, raised artificially, is included in the list for 1911 under the name of *C. glebelandsense*].)

Cymbidium eburneo-insigne. (*R. H.* 1914, 122; *J. H. F.* 1914, 92.) G. Garden hybrid. (Baron Ed. de Rothschild, Chateau d'Armainvilliers, Gretz, France.)

Cymbidium Hanburyanum. (*O. W.* v. 40.) G. Garden hybrid between *C. Tracyanum* and *C. erythrostylum*. (F. J. Hanbury.)

Cypripedium Floryi. (*O. R.* 1914, 23; *O. W.* iv. 92.) *Orchidaceae*. S.

Garden hybrid between *C. Niobe* and *C. Countess of Carnarvon*. (Flory & Black.) [*Paphiopedilum*.]

***Cypripedium macranthum album.** (*O. R.* 1914, 180; *G. C.* 1914, lv. 321. Orchidaceae. H. Flowers pure white. (G. Reuthe.) [*C. macranthum* var.]

Cypripedium mirum. (*O. R.* 1914, 26.) S. Garden hybrid between the New Hall Hey variety of *C. Euryades* and *C. Alcibiades*. (W. Thompson.) [*Paphiopedilum*.]

Cypripedium Pereirae. (*G. C.* 1914, lv. 326.) S. Supposed to be a natural hybrid between *C. niveum* and *C. Exul*. Island north of Penang. (J. D. Pereira, Singapore.) [*Paphiopedilum*.]

Cypripedium pictum. (*G. C.* 1914, lvi. 195; *O. W.* v. 15.) S. Garden hybrid between *C. nitens* and *C. glaucophyllum*. (H. T. Pitt.) [*Paphiopedilum*.]

Cypripedium Susannae. (*G. C.* 1914, lv. 410.) S. Garden hybrid between *C. glaucophyllum* and *C. Fairrieanum*. (Armstrong & Brown.) [*Paphiopedilum*.]

Cypripedium veganum. (*G. C.* 1914, lv. 50.) H. Allied to *C. pubescens*. The plants form large masses several feet across. Flowers large with a bright yellow lip. New Mexico. (T. D. A. Cockerell, Boulder, Colorado, U.S.A.)

***Cytisus pallidus.** (*B. M.* t. 8578.) Leguminosae. G. Shrub 4-10 ft. high. Leaves 3-foliolate; petiole $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long; leaflets oblanceolate or narrowly oblanceolate, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long, pubescent. Flowers about 10, in loose terminal racemes, over $\frac{1}{2}$ in. long, yellow, with a reddish stripe on the middle of the standard. [Syns. *C. linifolius*, Lamk., var. *pallidus*, Briq.; *Genista splendens*, Webb & Berth.] Canary Islands. (Kew.)

Dendrobium Bartelsianum. (*O. R.* 1914, 157.) Orchidaceae. S. Garden hybrid between *D. Wiganiae* and the Gatton Park variety of *D. Wiganianum*. (Sir J. Colman.)

Dendrobium Bassattii. (*G. C.* 1914, lv. 192; *O. R.* 1914, 116.) S. Garden hybrid between *D. Rolfeae* and *D. melanodiscus* Salteri. (Mrs. T. B. Haywood.)

Dendrobium Frederickii. (*G. C.* 1914, lv. 289; *O. R.* 1914, 159.) S. Garden hybrid between *D. fimbriatum* and *D. Thwaitesiae*. (R. G. Thwaites.)

Dendrobium pinifolium. (*O. R.* 1914, 347.) S. Nearly allied to *D. pachyglossum*, which it resembles in habit, but the flowers are larger and the sepals and petals are closely lined with red-brown on a light yellow ground. Stem about 6 in. long. Leaves narrow, acute, very rigid. Lateral sepals and the narrow petals much reflexed. Lip honey-yellow, brownish in front. Borneo. (Hon. N. C. Rothschild; Kew.)

Dendrobium plumosum. (*O. R.* 1914, 157.) S. Garden hybrid between *D. Cybele* and *D. signatum aureum*. (Sir J. Colman.)

Dendrobium Tofftii. (*O. R.* 1914, 360; 1915, 9, f. 1; *O. W.* v. 53.) S. Similar to *D. undulatum* in habit and shape of leaves. Stems up to 5 ft. high, and the inflorescence, when fully developed, about 1 $\frac{3}{4}$ ft. long, bearing many flowers, but sometimes much reduced and with few flowers. Sepals whitish. Petals longer, twisted, tinged with lilac. Lip broad, tinged and veined with purple. North Queensland. (Sir J. Colman.)

Dianthus superbus roseus. (*G. M.* 1914, 532.) Caryophyllaceae. H. A form with deep rose flowers. (P. S. Hayward.)

***Dianthus tenuis.** (*K. B.* 1914, 205.) Distinguished from *D. nitidus* by its 1-flowered stem, spreading leaves, calycine bracts 2 $\frac{1}{2}$ lin. long, and by its fragrant white flowers, which are nearly 1 in. across. The plant was raised from seeds received under the name of *D. Tenorei*. Possibly Italy. (Kew.)

***Dimorphotheca sinuata.** (*Jard.* 1914, 140.) Compositae. G. An annual herb forming tufts up to 1 $\frac{1}{2}$ ft. across. Leaves sinuate, toothed, bright green. Flower-heads 2 $\frac{1}{2}$ -3 $\frac{1}{2}$ in. across, chamomise-yellow with a satiny appearance, purple on the reverse of the ray-florets; disc bluish. South-West Africa. (Haage & Schmidt, Erfurt.)

Echeveria leucotracha. (*M. K.* 1914, 65, f.) Crassulaceae. G. A caulescent branched plant with the stem and branches densely covered with fox-brown hairs. Leaves in a loose rosette, oblong, elliptic or lanceolate, 2 $\frac{1}{2}$ -3 $\frac{1}{2}$ in long, fleshy, densely tomentose with rather long soft white

hairs, fox-brown at the apex. Flowering-branches axillary, loosely leafy, 12-16 in. long. Flowers in a simple spike. Sepals 5, lanceolate, free to the base, 5 lin. long. Petals 5, linear-lanceolate, reflexed at the apex, cinnabar-red, up to $\frac{3}{4}$ in. long. Mexico. (Darmstadt B. G.)

- ***Echium Perezii.** (K. B. 1914, 210.) Boraginaceae. G. Distinguished from *E. Wildpretii* by the lax thyrsus, conspicuously pedunculate elongated cymes, paler corolla, longer style-branches, and by other characters of the inflorescence. The leafblade is decurrent to the base. Canary Islands. (Dr. G. V. Perez, Tenerife; Kew.)

- ***Enkianthus campanulatus**, var. **Palibinii.** (Bean, T. & S. i. 512.) Ericaceae. H. This is the plant figured in B. M. t. 7059 as *E. campanulatus*. It differs from the type in having rather smaller deep red flowers produced in a distinct raceme. Japan. (J. Veitch & Sons.)

- ***Epidendrum porpax.** (O. R. 1914, 318.) Orchidaceae. G. A dwarf plant, closely allied to *E. Matthewsii*. Stems many, about 2 in. high. Leaves oblong, about $\frac{1}{2}$ in. long. Flowers solitary, terminal, with a broad purple lip and much paler sepals and petals. Costa Rica. (Kew.)

- ***Epidendrum profusum.** (B. M. t. 8551.) G. A new species allied to *E. ambiguum*, from which it may be distinguished by the denser panicle, smaller flowers, broader sepals and petals, and by the minutely crenulate lobes of the lip. The flowers are about $1\frac{1}{2}$ in. across, with pale yellowish-green sepals and petals and a white lip which is streaked with purple near the tip. Probably Mexico. (F. Sander & Sons; Kew.)

- ***Epilaelia Medusae.** (G. C. 1914, lv. 215.) Orchidaceae. G. Garden hybrid between *Laelia cinnabarina* and *Epidendrum cliare*. (Lord Rothschild.)

- Eria pilifera.** (O. R. 1914, 171.) Orchidaceae. S. Stems cylindric. Leaves lanceolate, distichous, short. Inflorescence reduced to a single flower, with a basal rosette of about 5 spreading narrow dull yellow bracts. Flowers white, covered with yellow papillae on the small rounded front lobe of the lip. Malaya. (Glasnevin B. G.)

- ***Eria sonkarls.** (O. R. 1914, 263.) S. Stems erect, more than 1 ft. high, with 6 or 7 lanceolate-oblong coriaceous leaves about 6 in. long and

$1\frac{1}{2}$ in. broad. Spikes erect, dense, 6 or 7 in. long. Pedicels woolly. Flowers woolly on the back, light yellow, with a few light reddish streaks on the side lobes of the 5-lobed lip. Malaya. (Kew.)

- Erica vulgaris Russelliana.** (G. C. 1914, lv. 76.) Ericaceae. H. Growths at first red-tinted, later assuming a golden hue. (L. R. Russell.) [*Caluna vulgaris*, Salisb., var.]

- Erigeron speciosus giganteus.** (Jard. 1914, 200, col. t.) Compositae. H. A very vigorous form, the stems reaching a height of nearly 3 ft. Flower-heads very broad. Ray-florets long and narrow, slightly reflexed at the tips, a delicate lilac-blue. (Cayeux & Leclerc, Vitry-sur-Seine, France.)

- Erysimum bracteatum.** (N. B. G. Edinb. viii. 185.) Cruciferae. H. Remarkable for the more or less persistent bracts of the inflorescence; these extend almost to the apex or sometimes more than half-way up. Plant 2-3 ft. high. Leaves linear or narrowly linear-lanceolate, $2\frac{1}{2}$ - $3\frac{1}{4}$ in. long. Flowers golden-yellow, in large racemes. South-Western China. (Bees, Ltd., Edinburgh B. G.)

- ***Erysimum linifolium.** (G. C. 1914, lv. 425; G. M. 1914, 477.) H. A perennial herb 1- $1\frac{1}{2}$ ft. high, forming large spreading masses. Leaves linear, sinuate on the margin, $3\frac{1}{2}$ in. long, $\frac{1}{2}$ in. broad. Flowers lilac, $\frac{1}{2}$ in. across, arranged in racemes. A reintroduction. It is recorded as having been first introduced in 1815. Spain. (C. Elliott; Glasnevin B. G.) [Syn. *Cheiranthus linifolius*; G. C. 1914, lvi. 186, 207, f. 73.]

- ***Euonymus semipersistens.** (Bean, T. & S. i. 543.) Celastraceae. H. Cultivated for many years as *E. Sieboldianus*. It is closely allied to *E. Bungeanus*, but it has firmer leaves, which persist until March unless the winter is severe, and its pink fruits are tapered at the base. China.

- ***Euonymus Wilsonii.** (Bean, T. & S. i. 543.) H. An evergreen shrub up to 20 ft. high. Leaves 3-6 in. long, 1- $1\frac{1}{2}$ in. broad, lanceolate, toothed. Fruits 4-lobed, remarkable in being clothed with awl-shaped spines $\frac{1}{2}$ in. long. Western China. (J. Veitch & Sons.)

- Euphorbia sinensis.** (K. B. 1914, 329.) Euphorbiaceae. H. Stem erect, herbaceous, round, tomentose. Leaves

oblong-linear, up to $3\frac{1}{2}$ in. long and $\frac{1}{2}$ in. broad, acute at the apex, abruptly narrowed at the base. Umbel terminal, compound, 3 in. across. Involucre campanulate, $1\frac{1}{2}$ lin. high; lobes 4 or 5, broadly semi-orbicular, very small. North-West China. (J. Veitch & Sons.)

***Evodia Daniellii.** (*Pl. Wils.* ii. 135; *Bean, T. & S.* i. 547.) Rutaceae. H. A tree. Leaves 9–15 in. long; leaflets 5–11, ovate-cordate to ovate-oblong, 2–5 in. long, glabrous above, pubescent on the midrib and in the axils of the veins beneath. North China and Corea. (Arnold Arboretum.)

***Evodia glauca.** (*Pl. Wils.* ii. 129; *Bean, T. & S.* i. 547.) H. A tree of medium size. Leaves 6–10 in. long; leaflets 5–15, oval-lanceolate to narrowly lanceolate, $1\frac{1}{2}$ –4 in. long, $\frac{1}{2}$ – $1\frac{1}{2}$ in. broad, distinct in their narrowness, in their glaucous undersurface and red petioles. Syn. *E. Fargesii*, Dode. China and Japan. (Arnold Arboretum.)

***Evodia Henryi.** (*Pl. Wils.* ii. 133; *Bean, T. & S.* i. 547.) H. A small tree easily recognised by its relatively small pyramidal inflorescence, rather large male flowers, and by the beak to the fruit. Leaves 6–12 in. long, with 3 to 9 ovate to ovate-lanceolate leaflets. Central China. (Arnold Arboretum.)

***Evodia hupehensis.** (*Pl. Wils.* ii. 133; *Bean, T. & S.* i. 547.) H. A tree reaching a larger size than any other species. Leaflets 5–9, narrowly ovate, $2\frac{1}{2}$ –5 in. long. Flowers in a broad panicle. Central China. (Arnold Arboretum.)

Evodia velutina. (*Pl. Wils.* ii. 134.) H. A very distinct new species, remarkable for the soft velvety pubescence on its leaves and young branches, and for the minute beak to its ripe capsule. It is a small tree with compound leaves having 3 to 5 pairs of oblong-lanceolate leaflets $2\frac{1}{2}$ –4 in. long. Flowers not described. Fruits small, purple-brown, in broad panicles. Western China. (Arnold Arboretum.)

Exochorda racemosa, var. Wilsonii. (*Pl. Wils.* i. 456; *R. H.* 1914, 209.) Rosaceae. H. Differs from the type (better known under the name of *E. grandiflora*) in being more vigorous and larger in every part. The petals of the fragrant white flowers are up to 1 in. long. Central China. (Arnold Arboretum.)

Exochorda serratifolia. (*R. H.* 1914, 209.) H. A very vigorous-growing species, distinct in having its leaves regularly and more deeply toothed. Flowers without odour, sometimes $2\frac{1}{2}$ in. across. Petals narrower than in the hybrid between *E. Alberti* and *E. grandiflora*. North China. (M. L. de Vilmorin, Les Barres, France.)

***Fraxinus Biltmoreana.** (*Bean, T. & S.* i. 564.) Oleaceae. H. Closely allied to *F. americana*, under which name it has been for many years in cultivation. It differs chiefly in the dense pubescence of the young shoots, the pubescence persisting for two years. South-Eastern United States. (Kew, &c.)

***Fraxinus texensis.** (*Bean, T. & S.* i. 574.) H. Closely allied to *F. americana*, but its leaves usually have only 5 leaflets, which are broader and more shortly pointed. Texas. (Kew.)

Gaillardia pulchella, var. albiflora. (*G. C.* 1914, lv. 67.) Compositae. H. A variety in which the yellow of the ray-florets is replaced by white faintly tinged with cream. New Mexico. (T. D. A. Cockerell, Boulder, Colorado, U.S.A.)

***Gaultheria pyrolloides, var. cuneata.** (*Pl. Wils.* i. 554; *G. C.* 1914, lv. 372.) Ericaceae. H. An attractive little evergreen plant, about 12 in. high, with obovate or oblong-obovate leaves and blue, afterwards snow-white, fruits. It differs from the type in its narrower leaves, more pubescent branchlets, and in its villous ovary and capsule. Western China. (Arnold Arboretum; Hon. Vicary Gibbs.)

***Gentiana aplata.** (*K. B.* 1914, 187.) Gentianaceae. H. Resembles *G. nivalis*, but the flowers are only about half the size. They are greenish-white with dark green lines and dots, 1 in. long and $\frac{3}{4}$ in. across. North China. (J. Veitch & Sons.)

Gentiana quinquenervia. (*K. B.* 1914, 328.) H. An erect glabrous herb with round stems. Leaves elliptic-lanceolate, acute, connate at the base, up to 5 in. long and $1\frac{1}{2}$ in. broad. Flowers 4–11, in sessile clusters in the axils of the upper leaves. Corolla broadly funnel-shaped, 1 in. long; tube pale green outside, spotted with purple-green on the upper part inside; lobes broadly ovate-triangular, $2\frac{1}{2}$ in. long, blue inside, green outside. North-West China. (J. Veitch & Sons.)

***Centiana rhodantha*.** (*G. C.* 1914, lv. 15.) *H.* A vigorous-growing species with a bushy habit and pink-white fringed flowers. Yunnan, China. Edinburgh B. G.)

***Centiana rigescens*.** (*G. C.* 1914, lv. 15.) *H.* A very floriferous late-flowering species with a bushy habit and persistent stems and leaves. Flowers violet-pink. Yunnan, China. (Bees, Ltd.)

****Centiana septemfida*, var. *lagodechiana*.** (*G. C.* 1914, lvi. 232, f. 92.) *H.* Stems ascending, 6-8 in. long, each bearing 2 to 4 flowers which are solitary on short pedicels in the axils of the upper leaves, instead of being in a head at the summit of the stem, as in the type. The flowers are about $1\frac{1}{2}$ in. across and are deep blue, with a paler throat and green or greenish-yellow spots. Eastern Caucasus. (Kew.)

***Ceranium Schiedeanaum*.** (*M. G. Z.* 1914, 361, f.) Geraniaceae. *H.* ? Rootstock thick and fleshy. Basal leaves long-stalked, softly hairy, usually 1-2 in. across, trisect, with pinnately lobed segments. Stems prostrate, branched, slender, leafy, rather long. Flowers usually 2 together on long pedicels, reddish-violet to blue-violet with a paler reticulation, about as large as those of *G. sanguineum*, but flatter and with narrower petals. Mexico. (Darmstadt B. G.)

****Claucidium palmatum*.** (*G. C.* 1914, lv. 337.) Ranunculaceae. *H.* Plant rather slender, 1 ft. high or more. Leaves rounded, the lower long-stalked, the uppermost sessile, palmately lobed and coarsely serrate, cordate at the base, the largest 6 in. across or more. Flowers solitary, 2-3 in. across, with 4 broad mauve sepals and yellow stamens. Japan. (A. Perry.)

****Clobularia incanescens*.** (*G. C.* 1914, lvi. 69, f. 29.) Selaginaceae. *H.* A dwarf perennial. Leaves in a compact rosette, evergreen, oval, $\frac{1}{2}$ in. long; petiole thin, $\frac{1}{4}$ - $\frac{3}{4}$ in. long. Flowering-stems 2 in. high, leafy, bearing globose pale blue flower-heads rather more than $\frac{1}{2}$ in. across. South Europe. (Glasnevin B. G.)

****Congora grossa*.** (*B. M. t.* 8562.) Orchidaceae. *S.* Pseudobulbs clustered, ovoid, 8-angled, 2-2 $\frac{1}{2}$ in. long. Leaves elliptic or obovate-elliptic, 8-12 in. long, 2 $\frac{1}{2}$ -3 $\frac{1}{2}$ in. broad. Scapes curved, pendent, 1 $\frac{1}{2}$ -2 ft. long, bearing long many-flowered

open racemes. Flowers yellowish or whitish, with numerous red and purple spots. Sepals oblong-lanceolate, $\frac{3}{4}$ -1 in. long. Petals falcately incurved, about $\frac{1}{2}$ in. long. Lip clawed; limb narrow, fleshy, 5-lobed. A re-introduction; it was in cultivation in 1877. Ecuador. (Kew.)

****Habenaria procera*.** (*O. R.* 1914, 278.) Orchidaceae. *S.* Plant about 18 in. high. Leaves lanceolate-oblong, very undulate, produced on the lower part of the stem. Racemes 12-30-flowered. Flowers white, with the tips of the sepals and spur green. Lip 3-lobed; side-lobes filiform. Spur about 4 in. long, pendulous. A re-introduction; it was in cultivation in 1855. See *Bot. Reg. t.* 1858. West Tropical Africa. (Kew.)

***Haberlea Austinii*.** (*G. C.* 1914, lv. 411.) Gesneriaceae. *H.* This was formerly regarded as a variety of *H. Ferdinandi-Cobergii* to which it is apparently closely allied. It appears to be a free grower, and has lilac or violet and white flowers. (Cunningham, Fraser, & Co.)

****Hibiscus Waimeae*.** (*B. M. t.* 8547.) Malvaceae. *G.* A tree up to 25 ft. high. Leaves broadly elliptic-ovate or suborbicular, toothed, 3 $\frac{1}{2}$ -8 in. long, 3-7 in. broad; veins purplish. Flowers solitary in the upper axils. Bracts 6-8, linear-subulate, about $\frac{1}{2}$ in. long. Corolla white; limb spreading; segments about 4 $\frac{1}{2}$ in. long. Syn. *H. Arnottianus*, *H. Mann.* Hawaiian Islands. (Kew.)

***Hippeastrum (Habranthus) Elwesii*.** (*K. B.* 1914, 330.) Amaryllidaceae. *G.* Leaves appearing with the flowers, linear, acuminate, concave, 10 $\frac{1}{2}$ in. long, 2 $\frac{1}{2}$ lin. broad. Peduncle cylindrical, 2-flowered. Perianth a clear yellow, blood-red inside the tube; tube funnel-shaped, scarcely $1\frac{1}{2}$ in. long; lobes subspreading, elliptic, 1 $\frac{1}{2}$ in. long. Argentina. (*H. J. Elwes.*)

***Huernia transvaalensis*.** (*K. B.* 1914, 249.) Asclepiadaceae. *G.* Resembles *H. guttata*, but the tube of the corolla is furnished inside with purple hairs, the lobes are dark purple, with yellow lines at the base, and the lobes of the interior corona are recurved at the apex. Transvaal. (Dep. Agric., Pretoria.)

****Hypericum laeve rubrum*.** (*G. C.* 1914, lvi. 16.) Hypericaceae. *H.* ? A free-flowering shrubby species, with sparingly leafy brown twiggy

stems about $1\frac{1}{2}$ ft. high. Leaves linear, about 1 in. long. Flowers about $\frac{1}{2}$ in. across, borne in dense corymbs, orange-red, with yellow stamens. Asia Minor. (Bees, Ltd.)

**Ilex pedunculosa*, var. *continentalis*. (Bean, T. & S. i. 649.) Aquifoliaceae. H. An evergreen shrub or tree up to 20 or 30 ft. high. Leaves unarmed, ovate or oval, entire, 4-5 in. long; petiole $\frac{1}{2}$ - $\frac{3}{4}$ in. long. Fruits bright red, $\frac{1}{2}$ in. long, on pedicels 1- $1\frac{1}{2}$ in. long. It differs from the type, which was introduced from Japan in 1893 but is probably not now in cultivation, in its longer leaves and minutely ciliate calyx. Central China. (J. Veitch & Sons.)

**Inula acaulis*. (G. C. 1914, lvi. 246, f. 97.) Compositae. H. An almost stemless perennial herb, rarely more than 1 in. high, forming mats of small lanceolate-spathulate dark green leaves. Flower-heads golden, $1\frac{1}{2}$ -2 in. across. Asia Minor. (Miss E. Willmott.)

Ione flavescens. (K. B. 1914, 373.) Orchidaceae. S. Pseudobulbs depressed-ovoid, 5 lin. long, 1-leaved. Leaves linear-oblong, about 2 in. long. Peduncles lateral, short, 2-flowered. Flowers medium-sized. Sepals pale yellowish-green. Petals and lip deep yellow. Burma. (Glasnevin B. G.)

Iris Boissieri x *tingitana*. (G. C. 1914, lvi. 322.) Iridaceae. H. Garden hybrid. (W. R. Dykes.)

Iris chrysographes x *Douglasiana*. (G. C. 1914, lv. 364.) H. Garden hybrid. (W. R. Dykes.)

**Iris Urumovii*. (G. C. 1914, lvi. 272.) H. Closely allied to *I. Sintenisii* and *I. graminea*. From the former it differs in being very glaucous, in having a slender habit, leaves that die right away in winter, and non-keeled spathes. From the latter it may be distinguished by its glaucous character and its ovary, which has a long slender neck. Flowers pale purple to dark red-purple, with some white on the falls. Bulgaria. (W. R. Dykes; Hon. N. C. Rothschild.)

**Iris Watsoniana*. (G. C. 1914, lv. 391, f. 177.) H. Very similar to *I. tenax* and *I. Douglasiana*, differing from the former by having branching stems, a slightly longer perianth-tube, and more sharply 3-sided ovary, and from the latter by its non-persistent leaves, short perianth-tube, divergent spathes, as well as by other characters. The

flowers are relatively large, of some shade of violet or lavender purple, usually with a suffusion of blue down the centre of standards and falls. California. (W. R. Dykes.)

**Ixora umbellata*. (B. M. t. 8577.) Rubiaceae. S. A large much branched free-flowering shrub. Leaves elliptic or oblong-elliptic, 6-10 in. long, 3- $4\frac{1}{2}$ in. broad. Flowers white, in terminal corymbs about 6 in. across. Calyx deeply lobed; lobes broadly ovate, ciliate. Corolla-tube slender, $1\frac{1}{2}$ in. long; lobes 4, oblancoolate-oblong, $\frac{1}{2}$ in. long. Java. (Kew.)

**Juniperus pachyphloea stricta*. (R. H. 1914, 344.) Coniferae. H. A form with compact habit and bluish leaves. (Barbier & Co., Orleans.)

**Kniphofia carinata*. (B. M. t. 8545.) Liliaceae. H.H. A new species allied to *K. comosa*, from which it is distinguished by its much shorter yellow filaments. Leaves $2\frac{1}{2}$ ft. long, 1 in. broad at the base, gradually tapering to an acuminate tip, thin, sharply keeled beneath. Raceme 6 in. long, densely flowered. Perianth clear yellow, $\frac{3}{4}$ in. long. South Africa. (Kew.)

**Kniphofia kewensis*. (G. C. 1914, lvi. 410.) H.H. The name given to the hybrid between *K. pauciflora* and *K. Macowanii*, which was described in G. C. 1893, xiv. 424. (Kew.)

**Kniphofia sparsa*. (G. C. 1914, lvi. 410.) H.H. A new name for the plant cultivated as *K. modesta* and figured in B. M. t. 7293. The true *K. modesta* is not nearly so stout a plant, and it is remarkable in having all its flowers directed to one side of the spike, while in *K. sparsa* they are rather loosely scattered, and are directed to all sides. Natal. (Kew.)

Laelia evershotensis. (O. W. iv. 112.) Orchidaceae. G. Garden hybrid between *L. xanthina* and *L. Iona*. (E. F. Clark.)

Laelio-cattleya ardens. (R. H. 1914, 334.) Orchidaceae. G. Garden hybrid between *Laelia Canhamiana* and *Cattleya Mossiae Quo Vadis*. (E. Bert, Bois-Colombes, Seine, France.)

Laelio-cattleya aurealis. (O. W. iv. 112.) G. Garden hybrid between *Laelia autumnalis* and *Cattleya aurea*. (F. Sander & Sons.)

Laelio-cattleya brugensis. (*G. C.* 1914, lvi. 15; *O. W.* iv. 252.) *G.* Garden hybrid between *L.-c. Martinii* and *L.-c. luminosa*. (*F. Sander & Sons.*)

Laelio-cattleya Chamberlainiana. (*O. R.* 1914, 371.) *G.* Garden hybrid between *L.-c. Anelia* and *L.-c. elegans Turneri*. (*A. Chamberlain.*)

Laelio-cattleya corneliensis. (*G. C.* 1914, lv. 192, 247; *O. W.* iv. 164.) *G.* Garden hybrid between *L.-c. Haroldiana* and *Cattleya Schroederiae*. (*Earl of Craven.*)

Laelio-cattleya gigantea. (*O. W.* iv. 187.) *G.* Garden hybrid between *Cattleya Warszewiczii* (*Gigas*) and *Laelia anceps*. (*Th. Pauwels, Meirelbeke, Belgium.*)

Laelio-cattleya jucunda. (*O. W.* iv. 188.) *G.* Garden hybrid between *Cattleya Percivaliana* and *L.-c. Edwardii*. (*F. Sander & Sons.*)

Laelio-cattleya labiosa. (*O. W.* iv. 164.) *G.* Garden hybrid between *Cattleya labiata* and *L.-c. luminosa*. (*Cypher & Sons.*)

Laelio-cattleya Martiniana. (*O. W.* iv. 92.) *G.* Garden hybrid between *Cattleya Martinii* and *L.-c. luminosa*. (*Th. Pauwels, Meirelbeke, Belgium.*)

Laelio-cattleya primulina. (*J. H. F.* 1914, 86; *R. H.* 1914, 122.) *G.* Garden hybrid between *L.-c. Doris* and *Cattleya Gaskelliana*. (*C. Maron & Son, Brunoy, Seine & Oise, France.*) [This name has also been given to a hybrid between *L.-c. Hon. Mrs. Astor* and *Cattleya fulvescens*, raised by *F. Sander & Sons*. See *G. C.* 1914, lvi. 375.]

Laelio-cattleya Swanboroughii. (*O. R.* 1914, 37, 58.) *G.* Garden hybrid between *L.-c. Dominiana* and *L.-c. Andromeda*. (*Mrs. Sheppee.*)

Laelio-cattleya Tri-lobata. (*O. W.* iv. 187.) *G.* Garden hybrid between *Cattleya Trianae* and *Laelia lobata*. (*E. F. Clark.*)

Laelio-cattleya Wilfrediana. (*G. C.* 1914, lv. 51.) *G.* Garden hybrid between *L.-c. cinnabrosa* and *Cattleya Aclandiae*. (*W. H. St. Quintin.*)

***Larix Mastersiana.** (*Pl. Wils.* ii. 19.) *Coniferae.* *H.* A new species closely allied to *L. Griffithii* from which it may be distinguished by the papillose epidermis of the leaves,

and by the smaller cones, which are 1½–1¾ in. long, with smaller bracts gradually, not abruptly, cuspidate at the apex. Western China. (*Arnold Arboretum.*)

Leucampyx Newberryi. (*G. C.* 1914, lv. 67.) *Compositae.* *H.* A perennial herb, 1–2 ft. high, woolly, glabrate when old. Leaves pinnately divided into very narrow segments. Flower-heads few or several. Involucre nearly ½ in. across. Ray-florets ¾ in. long, at first yellow, soon changing to cream-colour or white. See *Gray, Syn. Fl. N. Amer.* i. pt. 2, ed. 2, 362. Colorado and New Mexico. (*T. D. A. Cockerell, Boulder, Colorado, U.S.A.*)

***Lindera megaphylla.** (*Bean, T. & S.* ii. 30.) *Lauraceae.* *H.* An evergreen shrub or tree. Leaves oblong to oblanceolate, entire, 4–9 in. long, 1–2½ in. broad, very glossy and dark green above, pale and glaucous beneath; petiole ½–1 in. long. Flowers numerous, in shortly stalked axillary umbels. Central and Western China. (*J. Veitch & Sons.*)

Lithraea Gilliesii. (*R. H.* 1914, 200, f. 61.) *Anacardiaceae.* *G.* A small evergreen tree reaching about 10 ft. high, attractive on account of its reddish-brown young growths and glazed leaves. Branches often in whorls of 4. Leaves dark green, 3- or 5-foliate; leaflets lanceolate. Inflorescences in the upper axils, few-flowered. Flowers small, yellowish-white. Fruits small. Brazil and Chili. (*Tunis B. G.*) [*L. Aroeirinha, March.*]

***Livistona decipiens.** (*B. T. O.* 1914, 13, t. 1.) *Palmae.* *S.* A new species which has been cultivated on the Riviera under the erroneous names of *Copernicia cerifera* and *Livistona inermis*. It is remarkable for the entangled appearance of its crown of leaves, which are very deeply divided into about 80 segments, the outer of which are very narrow; all are deeply bipartite, the ultimate segments having long-acuminate flaccid-pendulous tips. The petiole has some small spines only at the base, and the spathe is glabrous. See *Martelli, Webbia*, iii. 295. Australia.

***Lonicer a alseuosmoides.** (*Bean, T. & S.* ii. 39.) *Caprifoliaceae.* *H.* A pretty climbing evergreen shrub. Leaves narrowly oblong, 1½–2 in. long, ¼–½ in. broad. Flowers at the apex of the shoots, forming a short

broad panicle. Corolla purple inside, yellow outside, funnel-shaped, $\frac{1}{2}$ in. long. Fruit globose, black. Western China. (J. Veitch & Sons.)

***Lonicera Delavayi.** (Bean, T. & S. ii. 41.) H. A climber belonging to the same group as *L. japonica*. Leaves ovate-lanceolate, 2-5 in. long, $\frac{3}{4}$ -2 in. broad, glabrous above, grey-felted beneath; petiole $\frac{1}{4}$ - $\frac{1}{2}$ in. long. Flowers in axillary pairs at the end of the shoot, forming a kind of panicle, fragrant. Corolla pale yellow; tube slender, 2 in. long; limb 2-lipped, the larger lip $\frac{3}{4}$ in. long. Syn. *L. similis*, var. *Delavayi*, Rehd. Central and Western China. (M. L. de Vilmorin, Les Barres, France.)

Lonicera mupinensis. (Pl. Wils. i. 138; G. C. 1914, lv. 373.) H. Bush about 4 ft. high. Leaves variable in shape, often elliptic-oblong or oblong, 2 $\frac{1}{2}$ -5 in. long; petiole 2 $\frac{1}{2}$ -4 in. long. Flowers 2 together on long peduncles, dark red, small. Western China. (Arnold Arboretum; Hon. Vicary Gibbs.)

***Lonicera trichosantha.** (Bean, T. & S. ii. 59.) H. A deciduous vigorous species forming a rounded dense leafy bush. Leaves oval to obovate, 1-2 in. long, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. broad; petiole $\frac{1}{2}$ - $\frac{3}{4}$ in. long. Flowers pale yellow, a deeper shade when fading. Corolla $\frac{1}{2}$ - $\frac{3}{4}$ in. long, hairy outside. Berries red. Western China. (Arnold Arboretum.)

Lonicera yunnanensis, var. *tenuis*. (Bean, T. & S. ii. 59.) H. A low creeper, with slender glabrous stems. Leaves oblong or narrowly obovate, smaller than in the type in which they are 1 $\frac{1}{2}$ -3 in. long and about $\frac{1}{2}$ as broad; upper pair or pairs connate, bearing the sessile flowers in their axils. Corolla yellow, $\frac{3}{4}$ -1 in. long. South-Western China. (J. Veitch & Sons.)

Lysionotus Willmottiae. (G. C. 1914, lvi. 17, 100.) Gesneraceae. G. A dwarf shrub with ovate-lanceolate leaves and lilac-blue flowers $\frac{1}{2}$ in. long, resembling those of a *Pentstemon*. China. (Miss Willmott.)

Mammillaria conspicua. (M. K. 1912, 163; 1914, 37, f.) Cactaceae. G. Stem simple, cylindric - globose, nearly 6 in. high. Tubercles very much crowded, conical, about $\frac{1}{2}$ in. long; juice not milky. Areolae small, subelliptic, the younger sparingly woolly but soon naked. Radial spines 16-25, rigid, up to about $\frac{1}{2}$ in. long;

central spines 2, up to 5 in. long, somewhat curved. Flowers unknown. Fruits cylindric-clubshaped, carmine - red. Mexico (Darmstadt B.G.)

Mammillaria Cürkeana. (M. K. 1914, 52, f.) G. Stem simple, depressed-globose, about 2 $\frac{1}{2}$ in. high and 3 $\frac{1}{2}$ in. broad, pale to dark green. Tubercles thick, rounded at the apex, about $\frac{3}{4}$ in. long and $\frac{3}{4}$ in. broad. Radial spines 7, subulate, straight, strong, up to $\frac{3}{4}$ in. long, 3 or 4 much more slender than the others; central spines 2 or 3, very thick, $\frac{3}{4}$ - $\frac{1}{2}$ in. long. Flowers unknown. Mexico. (F. De Laet, Contich, near Antwerp.)

Masdevallia curtipes. (G. C. 1914, lvi. 143; O. R. 1914, 237.) Orchidaceae. G. A near ally of *M. infracta*, differing in having very short scapes which are only about a third as long as the leaves. It is a free-flowering pretty species with a rosy purple perianth, yellowish at the tips of the segments. Brazil. (F. Sander & Sons.)

***Mazus reptans.** (B. M. t. 8554.) Scrophulariaceae. H. A new species which was exhibited in 1913 under the name of *M. rugosus* (G. C. 1913, liii. 158, 190, 210, f. 94), from which it is quite distinct. It is a tufted perennial herb 1-2 in. high, with prostrate stems which root at the nodes. Leaves lanceolate, $\frac{3}{4}$ -1 in. long, including the petiole, few-toothed. Racemes erect, 1 $\frac{1}{2}$ -2 in. long, few-flowered. Corolla unequally 2-lipped, about $\frac{3}{4}$ in. long, purplish-blue, blotched with white, yellow and red-purple on the lower lip. Himalaya. (Wargrave Plant Farm.)

***Meconopsis rudis.** (B. M. t. 8568.) Papaveraceae. H. A monocarpic herb with a simple scapose prickly stem 1 $\frac{1}{2}$ -3 ft. high. It is closely allied to *M. aculeata*, but differs in having entire or nearly entire leaves and flowers with always more than 4 petals. Western China. (Arnold Arboretum; Kew.)

***Meliosma Beaniana.** (Pl. Wils. ii. 206.) Sabiaceae. H. Differs from all the other species of the genus in having the flowers in axillary instead of terminal panicles. It is a very handsome tree with pinnate leaves 6-14 in. long and small precocious white flowers. Central and Western China. (Arnold Arboretum.)

***Mesembryanthemum fulviceps.** (K. B. 1914, 167.) Ficoideae. G. Plant-bodies obconical, truncate, 1-2 in.

- long, about 1 in. across at the apex, marked with small rounded dark green spots. Leaves 2, united beyond the middle. Flowers unknown. Great Namaqualand. (Kew.)
- *Metrosideros lucida.** (*G. C.* 1914, lv. 450, f. 206; lvi. 31.) Myrtaceae. H. or H.H. A tree 30-60 ft. high or sometimes a shrub. Leaves lanceolate or narrowly oval, acute, 2-3½ in. long, shining green, gland-dotted. Flowers several together at the ends of the branches, attractive owing to their numerous crimson stamens which are up to 1 in. long. (L. Messel, &c.)
- Miltonia vexillaria illustris.** (*G. C.* 1914, lvi. 15; *G. M.* 1914, 574.) Orchidaceae. S. Flowers rather large. Sepals and petals rose-pink. Lip white with a red blotch at the base and faint red veins. (F. Sander & Sons.)
- *Morus cathayana.** (*Bean, T. & S.* ii. 85.) Urticaceae. H. Tree 10-20 ft. high. Leaves cordate, 3-6 in. long in adult plants, roundish-toothed or often 3-lobed, hispid above, softly hairy beneath; petiole about 1 in. long. Male spikes ¾ in. long, on a slender peduncle about as long. Female spikes similar in length but more densely flowered. Central China. (Arnold Arboretum.)
- Nicotiana plumbaginifolia hybrida.** (*Jard.* 1914, 140.) Solanaceae. G. or H.H. Garden hybrid between *N. plumbaginifolia* and *N. affinis hybrida*. (Dammann & Co., Naples.)
- Nyssa sinensis.** (*Bean, T. & S.* ii. 103.) Cornaceae. H. A deciduous tree 20-40 ft. high. Leaves narrowly oval, tapering at apex and base, 4-6 in. long, 1½-2 in. broad; petiole ½ in. long. Flowers unattractive, the male in a rounded head ½ in. across, on a slender stalk 1-1½ in. long, the females few, on longer stalks. Fruit oblong, ½ in. long, bluish. Central China. (J. Veitch & Sons.)
- Odontioda Ashtonii.** (*G. C.* 1914, lv. 442; *O. R.* 1914, 216.) Orchidaceae. G. Garden hybrid between *Odontoglossum Armstrongiae* and *Cochlidia Noetzliana*. (E. R. Ashton.)
- Odontioda Colmanii.** (*G. C.* 1914, lv. 226; *O. R.* 1914, 125.) G. Garden hybrid between *O. Bradshawiae* and *Odontoglossum amabile*. (Sir J. Colman.)
- Odontioda crispilla.** (*G. C.* 1914, lvi. 226; *O. W.* v. 15.) G. Garden hybrid between *O. Cecilia* and *Odontoglossum crispum*. (R. G. Thwaites.)
- Odontioda delicata.** (*G. C.* 1914, lv. 410.) G. Garden hybrid between *Odontioda St. Fuscien* and *Odontoglossum ardentissimum*. (F. Sander & Sons.)
- Odontioda Fowleriana.** (*O. W.* iv. 208.) G. Garden hybrid between *O. Bradshawiae* and *Odontoglossum percultum*. (J. Gurney Fowler.)
- Odontioda fuscium.** (*O. R.* 1914, 125.) G. Garden hybrid between *O. St. Fuscien* and *Odontoglossum eximium*. (R. G. Thwaites.)
- Odontioda Gratrixiae.** (*O. R.* 1914, 190; *O. W.* iv. 187.) G. Garden hybrid between *O. Charlesworthii* and *Odontoglossum amabile*. (S. Gratrix.)
- Odontioda illustris.** (*G. C.* 1914, lv. 192.) G. Garden hybrid of unknown parentage. (Pantia Ralli.)
- Odontioda rubens.** (*O. W.* iv. 208.) G. Garden hybrid between *O. Charlesworthii* and *Odontoglossum eximium*. (J. Gurney Fowler.)
- *Odontioda Thompsoniae.** (*G. C.* 1914, lv. 98; *O. R.* 1914, 56, 61.) G. Possibly a form of *O. Vuylstekeae* or a hybrid derived from it. (W. Thompson.)
- Odontocidium southgatense.** (*G. C.* 1914, lv. 154.) Orchidaceae. G. Garden hybrid between *Odontoglossum Edwardii* and *Oncidium macranthum*. (Hassall & Co.)
- Odontoglossum amandens.** (*O. W.* iv. 139.) Orchidaceae. G. Garden hybrid between *O. Wilckeanum* and *O. Rolfeae*. (J. & A. McBean.)
- Odontoglossum amaranthum.** (*G. C.* 1914, lv. 98; *O. R.* 1914, 61.) G. Garden hybrid of unrecorded parentage. (W. Thompson.)
- Odontoglossum aurosum.** (*O. R.* 1914, 95; *O. W.* iv. 138.) G. Garden hybrid between *O. cirrhosum* and *O. excellens*. (H. Dixon.)
- Odontoglossum chryseum.** (*O. W.* iv. 138.) G. Garden hybrid between *O. nobile* and *O. excellens*. (F. Sander & Sons.)
- Odontoglossum crispum hololeucum.** (*G. C.* 1914, lvi. 376.) G. Flower large, round, with a yellow blotch on the lip. (W. Thompson.)

Odontoglossum fulgidum. (*G. C.* 1914, lv. 31; *O. R.* 1914, 27.) *G.* Garden hybrid of unknown parentage, "but showing the influence of *O. Harryanum*." (W. Thompson.)

Odontoglossum igneum. (*O. R.* 1914, 58.) *G.* Garden hybrid between *O. cirrhosum* and *O. Wilckeanum*. (*F. Sander & Sons.*)

Odontoglossum jucundum. (*O. W.* iv. 208.) *G.* Garden hybrid between *O. crispum* and *O. McNabianum*. (*F. Sander & Sons.*)

Odontoglossum Lakinae. (*G. C.* 1913, liv. 317; 1914, lv. 311, f. 136.) *G.* Garden hybrid of unknown parentage. (*E. H. Davidson.*)

Odontoglossum Marnixii. (*J. H. F.* 1914, 384.) *G.* Garden hybrid between *O. cirrho-Edwardii* and *O. Hunnewellianum*, or according to *R. H.* 1914, 334, between *O. Hunnewelliano-crispum* and *O. crispum Cooksoniae*. (*M. Nicolas, Pr  cy-sur-Oise, France.*)

Odontoglossum nebulum. (*O. R.* 1914, 187.) *G.* Garden hybrid between *O. nebulosum album* and *O. aspersum*. (W. Thompson.)

Odontoglossum Newlingii. (*G. C.* 1914, lv. 226; *O. R.* 1914, 125.) *G.* Garden hybrid between *O. Ossulstonii* and *O. cirrhosum*. (*R. G. Thwaites.*)

Odontoglossum purpuratum. (*G. C.* 1914, lv. 31; *O. R.* 1914, 28.) *G.* Garden hybrid of unrecorded parentage, but the lip of the flower shows traces of *O. Harryanum*. (W. Thompson.)

Odontoglossum Rickardsiae. (*G. C.* 1914, lvi. 404.) *G.* Garden hybrid between *O. Rossii* and *O. percultum*. (*R. Windsor Rickards.*)

Odontoglossum rubens. (*G. C.* 1914, lv. 31.) *G.* Garden hybrid of unrecorded parentage. (W. Thompson.)

Odontoglossum sandhurstianum. (*G. C.* 1914, lv. 77, f. 38; *O. R.* 1914, 59.) *G.* Garden hybrid between *O. coronarium* and *O. Edwardii*. (*Armstrong & Brown.*) [*Syn. O. sandhurstiense*; *O. W.* iv. 139.]

Odontoglossum Troyanowskiae. (*O. W.* iv. 252.) *G.* Garden hybrid between *O. Thompsonianum* and *O. Rolfeae*. (*F. Sander & Sons.*)

Odontoglossum Uroanthum. (*G. C.* 1914, lvi. 60; *O. W.* iv. 252.) *G.* Garden hybrid between *O. Kejeljani  * and *O. Uroskinneri*. (*F. Menteith Ogilvie.*)

Odontoglossum Uroexcellens. (*G. C.* 1914, lvi. 246; *O. R.* 1914, 351.) *G.* Garden hybrid between *O. Uroskinneri* and *O. excellens*. (*R. Ashworth.*)

Odontonia Charlesworthii. (*G. C.* 1914, lvi. 107, f. 45; *O. R.* 1914, 241, f. 28.) *Orchidaceae.* *G.* Garden hybrid between *Odontoglossum Uroskinneri* and *Miltonia vexillaria*. (*Charlesworth & Co.*)

Odontonia Luciliae. (*G. C.* 1914, lv. 137; *O. R.* 1914, 127.) *G.* Garden hybrid between *Odontoglossum cirrhosum* and *Miltonia spectabilis Moreliana*. (*Charlesworth & Co.*)

***Oenothera Hewettiana.** (*G. C.* 1914, lv. 84.) *Onagraceae.* *H.* A new species belonging to the same group as *O. Lamarckiana*. It has large yellow flowers the buds of which are as red as in *O. rubrinervis*. New Mexico. (*T. D. A. Cockerell, Boulder, Colorado, U.S.A.*)

***Olearia odorata.** (*Bean, T. & S.* ii. 106.) *Compositae.* *H.* A shrub with slender wiry little-branched terete stems. Leaves opposite, linear or spatulate, $\frac{3}{4}$ –1½ in. long, $\frac{1}{4}$ –½ in. broad, bright green above, covered with white hairs beneath. Flower-heads $\frac{1}{4}$ in. across, fragrant, dull greyish-brown. Introduced a few years ago as *O. virgata*. New Zealand.

Oncidioda Mauricii. (*G. C.* 1914, lv. 321, 326, f. 143; *R. H.* 1914, 243.) *Orchidaceae.* *G.* Garden hybrid between *Oncidium tigrinum* and *Cochlidoda vulcanica*. (*H. Graire, Amiens, France.*)

Oncidium Engelii. (*O. R.* 1914, 47.) *Orchidaceae.* *G.* A distinct and attractive plant with a trailing inflorescence of white and brown flowers, which are larger and more compactly arranged than in *O. zebrium*, with which the species has been confused. Venezuela. (*Charlesworth & Co.*)

Oncidium Leiboldii. (*O. R.* 1914, 361, f. 45.) *G.* A species with more or less equitant leaves and fragrant flowers, allied to *O. velutinum*, but much smaller. Cuba. (*F. J. Le Moyne, Baltimore, Maryland, U.S.A.*)

Oncidium Ottonis. (*Orchis*, 1914, 57, f. 11.) G. A new species very closely allied to *O. concolor*, but it has smaller and shorter pseudobulbs, the leaves are dark green instead of pale green, the flowers are somewhat larger, the sepals are marked with elongated blotches of brown-red or brown-purple near the distinctly undulate margin, and the lip is much more undulate and has a longer claw. South Brazil. (O. Beyrodt, Marienfelde, Berlin.)

Oncidium patulum. (*Orchis*, 1914, 18, col. t.) G. Described as a new species of the section *Miltoniastrum*, and allied to *O. Cavendishianum*, its flowers being similar in colour but smaller. The inflorescence is spreading, 5-7 in. long, paniculate, 20-30-flowered. Flowers fleshy, about 1 in. across. Probably Brazil. (Dahlem B. G.) [*O. nanum*, Lindl.; O. R. 1915, 39.]

Oncidium raniferum, var. **Binoti.** (*B. M. H. N.* 1913, 532.) G. Distinguished from the type by the smaller not emarginate lip. Brazil. (Paris B. G.)

***Osteomeles Schwerinae.** (*Bean, T. & S.* ii. 113, f.) Rosaceae. H. This is the plant figured in *B. M. t.* 7354 as *O. anthyllidifolia*, from the typical form of which it differs in its smooth fruit, less hairy calyx-lobes, and usually narrower leaves. Western China. (Paris B. G.; Kew.)

***Osteomeles subrotunda.** (*Bean, T. & S.* ii. 114.) H. Distinguished from *O. Schwerinae* by its stunted branches, slow growth, and smaller obovate leaflets. Japan. (Paris B. G.; Kew.)

Othonna pachypoda. (*G. C.* 1914, lvi. 27, f. 14.) Compositae. G. A new species remarkable for its short stout stem and slender trailing branches, the latter having a smooth pale brown bark. Leaves linear-spathulate or linear-oblancoelate, $1\frac{1}{2}$ -2 $\frac{1}{2}$ in. long. 2-4 lin. broad. Flower-heads 2 or 3 together, yellow, with usually 5 ray-florets and about 15 disc-florets. South-West Africa. (Cambridge B. G.)

***Pachysandra axillaris.** (*Bean, T. & S.* ii. 118.) Euphorbiaceae. H. An evergreen semi-woody plant. Stems 4-10 in. high. Leaves 3-6 near the apex of each stem, ovate, coarsely toothed in the upper part, 2-4 in. long, $1\frac{1}{2}$ -2 $\frac{1}{2}$ in. broad. Flowers white, borne in erect axillary spikes $\frac{3}{4}$ -1 in. long. South-West China. (J. Veitch & Sons.)

Papaver orientale x somniferum. (*G. C.* 1914, lvi. 208.) Papaveraceae. H. Garden hybrid. (A. Perry.)

***Pelargonium transvaalense.** (*G. C.* 1914, lv. 102, f. 47.) Geraniaceae. G. A pretty species with a knotty or gnarled rootstock and herbaceous stems about 2 ft. high, covered, as well as the leaves, with short more or less glandular hairs. Leaves few, 3-5-angled, the largest 7 in. across; petiole up to 10 in. long. Peduncles 6-9 in. long. Umbels few-flowered. Pedicels $\frac{1}{2}$ - $\frac{3}{4}$ in. long. Flowers pale pink, $1\frac{1}{2}$ in. across. Transvaal. (Cambridge B. G., where it was provisionally named *P. Thorncroftii*.)

***Pentstemon isophyllus.** (*Haage & Schmidt, Cat.* 1914, 197, f.) Scrophulariaceae. H.H. Plant 2 $\frac{1}{2}$ -3 $\frac{1}{2}$ ft. high, with long erect inflorescences of beautiful carmine-red flowers striped with white inside. Mexico. (Haage & Schmidt, Erfurt.)

***Phellodendron chinense.** (*Bean, T. & S.* ii. 131.) Rutaceae. H. Allied to *P. japonicum*, but the leaflets are longer, more oblong-lanceolate, and the fruit-clusters are only 1-2 in. broad and 2-3 $\frac{1}{2}$ in. long, and are nearly sessile. Central China. (J. Veitch & Sons.)

***Philadelphus incanus.** (*Bean, T. & S.* ii. 135, f.) Saxifragaceae. H. Shrub up to 6 ft. high or more. Leaves ovate or oval, finely toothed, 2 $\frac{1}{2}$ -4 in. long, $1\frac{1}{2}$ -2 $\frac{1}{2}$ in. broad, much smaller on the flowering twigs; petiole up to $\frac{1}{2}$ in. long. Flowers white, fragrant, about 1 in. across, opening in the later half of July. Central China. (J. Veitch & Sons.)

***Photinia Davidsoniae.** (*Pl. Wils.* i. 185; *Bean, T. & S.* ii. 144.) Rosaceae. H. A very handsome evergreen tree, most closely allied to *P. serrulata*, but distinguished by its shorter petioles, downy inflorescence, and smaller flowers and fruit. Central China. (J. Veitch & Sons.)

Pieris Forrestii. (*N. B. G. Edinb.* viii. 196.) Ericaceae. H. A very graceful shrub differing from *P. formosa* in several minor characters. It has a much more pendent habit; the leaves are often peculiarly reflexed along the branches; the pedicels are slenderer, with narrower bracts; the sepals are whitish, and the corolla is different in shape. Syn. *Gaultheria Forrestii*, Hort., not of Diels. South-Western China. (Bees, Ltd.; Edinburgh B. G.)

***Pileostegia viburnoides.** (*G. C.* 1914, lvi. 225, 238, f. 95; *G. M.* 1914, 724.) Saxifragaceae. H. A shrub somewhat resembling *Skimmia japonica*, with an inflorescence like that of an *Aralia*. Leaves obovate-oblong, about $2\frac{1}{2}$ in. long, acuminate, entire, coriaceous. Flowers small, white, globose in the bud stage. The corolla is pushed off as a little cap by the stamens, which are the most conspicuous part of the flower. Khasia Mountains, China, Japan, Formosa. (Hon. Vicary Gibbs.)

***Pinguicula Reutheriana.** (*G. C.* 1914, lv. 364; *G. M.* 1914, 434.) Lentibulariaceae. H. A diminutive plant, only 3 in. high when in flower. Leaves oval, about $1\frac{1}{2}$ in. long and $\frac{3}{4}$ in. broad, slightly incurved along the margin, arranged in a rosette. Flowering-stems erect. Flowers solitary, pale rose-pink with deeper pink lines and a violet-rose spur. Alps of Dauphiné. (*G. Reuthe*.)

***Pinus pumila.** (*Bean, T. & S.* ii. 176.) Coniferae. H. A close ally of *P. Cembra*. It is a dwarf mostly prostrate shrub, never more than 10 ft. high. Leaves in fives, $1\frac{1}{2}$ -2 in. long, usually entire on the margins. Cones $1\frac{1}{2}$ in. long, orange-brown, never opening. A re-introduction. Eastern Asia. (*H. Clinton Baker*.)

***Pinus yunnanensis.** (*Bean, T. & S.* ii. 193.) H. ? A tree 100 ft. high in the wild state. Leaves in twos or in threes, 6-9 in. long, slender, much twisted in young specimens, toothed on the margins, finely pointed. Cones shortly stalked, 4-5 in. long, 2-3 in. broad before expanding, brown. Western China and Eastern Tibet. (*Arnold Arboretum*.)

Pirocydonia. (*R. H.* 1914, 27, ff. 6-8.) Rosaceae. H. *P. Danieli* and *P. Winkleri* are two forms of a graft hybrid obtained by grafting Williams' Bon Chrétien pear on the common quince. (St. Vincent College Gardens, Rennes, France.)

***Pittosporum pauciflorum.** (*Bean, T. & S.* ii. 197.) Pittosporaceae. H. An evergreen shrub 4-6 ft. high. Leaves in a cluster at the ends of the shoots, obovate to oblanceolate, entire, 3-5 in. long, $\frac{3}{4}$ - $1\frac{1}{2}$ in. broad; petiole $\frac{1}{2}$ in. long or less. Flowers fragrant, dull yellow, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, axillary, solitary or a few together in racemes. Central China. (*Kew*.)

***Platanus racemosa.** (*Bean, T. & S.* ii. 203.) Platanaceae. H. ? A tree 40-100 ft. high in the wild state.

Leaves usually 5- sometimes 3-lobed, slightly cordate at the base, 6-12 in. broad and rather more in length, thickly clothed beneath, especially along the midrib and veins, with a pale persistent down; lobes reaching half-way to the midrib or more, pointed, shallowly often distantly toothed; petiole stout, 1-3 in. long. Flower-heads globose, 2-7 on a pendulous peduncle. California. (*F. R. S. Balfour*.)

Platyterium Cordreyi. (*G. C.* 1914, lv. 363; *G. M.* 1914, 434.) Filices. S. Garden hybrid between *P. Veitchii* and *P. alcinorne*. (*H. B. May & Sons*.)

***Pleione pogonioides.** (*B. M.* t. 8588; *O. B.* 1914, 108.) Orchidaceae. G. A terrestrial herb 3-4 in. high. Pseudobulbs ovoid, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, 1-leaved. Leaves elliptic-lanceolate, 2-6 $\frac{1}{2}$ in. long, $\frac{3}{4}$ - $1\frac{1}{2}$ in. broad. Flower terminal, showy, rosy red with a whitish disc; segments $1\frac{1}{2}$ - $1\frac{1}{2}$ in. long. Central China. (*Charlesworth & Co.*)

***Pleurothallis Lankesteri.** (*K. B.* 1914, 210.) Orchidaceae. G. Differs from the closely allied *P. myriantha*, which it resembles in habit, by the shape and colour of the lip. Flowers minute, borne in fascicles below the leaves, deep yellow, with the obovate-oblong lip and the column dark purple. Costa Rica. (*Kew*.)

***Poinsettia pulcherrima rosea.** (*G. C.* 1914, lvi. 190, col. t.) Euphorbiaceae. G. Bracts rosy pink. (*H. B. May & Sons*.) [*Euphorbia pulcherrima*, var.]

Poinsettia pulcherrima Trebsti. (*M. G. Z.* 1914, 19; *J. of H.* 1914, lxviii. 397.) G. A sport from the variety *alba*. Bracts delicate salmon-pink, the lowest somewhat shaded with green. (*A. Trebst, Merseburg, Germany*.) [*Euphorbia pulcherrima*, var.]

***Polystachya Hislopil.** (*K. B.* 1914, 375.) Orchidaceae. S. An epiphytic herb. Pseudobulbs tufted, ovoid-oblong or fusiform-oblong, $1\frac{1}{2}$ - $1\frac{3}{4}$ in. long, 3-4 leaved. Leaves lanceolate-oblong, 2 $\frac{1}{2}$ -5 in. long. Peduncles terminal, about 5 in. long, few-flowered. Sepals and petals light emerald-green, the former 5-6 lin. long and the latter 4 lin. long. Lip 3-lobed, 4 lin. long, white with a rose-coloured margin and a few rose-coloured veins and pale purple spots. Rhodesia. (*Kew*.)

Polystichum munitum undulatum. (*G. C.* 1914, lv. 442.) Filices. H.

- Fronds more shining than in the type and the pinnae in the upper two-thirds of their length are so undulate as to form spirals. British Columbia. (J. Fraser, Uchulet, British Columbia; C. T. Drury.)
- **Populus generosa*.** (*G. C.* 1914, lvi. 257, ff. 102-103.) Salicaceae. Garden hybrid between *P. angulata* and *P. trichocarpa*. (Glasnevin B. G.)
- Populus Henryana*.** (*G. C.* 1914, lvi. 47, f. 17.) *H.* A hybrid of unknown origin. It has a branching habit similar to that of *P. monilifera*. Only the male form is known, and of this there is a fine specimen 100 ft. high at White Knights, Reading. See *Elwes & Henry, Trees*, vii. 1829.
- Populus Lloydii*.** (*G. C.* 1914, lvi. 66, f. 27.) *H.* A hybrid of which the parents are probably *P. nigra*, var. *betulifolia* and *P. serotina*. See *Elwes & Henry, Trees*, vii. 1830. (Major Lloyd.)
- Potentilla Forrestii*.** (*N. B. G. Edinb.* viii. 198.) Rosaceae. *H.* Very closely allied to *P. nivea*, but it is a larger plant with the leaves grey-tomentose beneath, deeply trifid obovate calycine bracts, and mature achenes shorter than the style. Flowers yellow. Almost certainly from Yunnan, China. (Edinburgh B. G.)
- **Potentilla Purdomii*.** (*K. B.* 1914, 184.) *H.* A very distinct new species characterised by the pinnate leaves being green on both sides, by the very broadly sessile leaflets, by the carpels being pilose only at the apex, and by the filiform style. It is a herb up to 12 in. high, with yellow flowers about $\frac{2}{3}$ in. across. North China. (J. Veitch & Sons.)
- **Primula bellidifolia*.** (*Gard.* 1914, 399.) Primulaceae. *H.* Probably only a large form of *P. farinosa*. It has bluish-purple flowers in good-sized heads. Himalaya. (J. Mac-Watt.)
- Primula Clementinae*.** (*Gard.* 1914, 93.) *H.* Plant more or less covered with farina. Scape slender, considerably longer than the leaves, bearing an umbel of several lilac flowers. Western China. (Bees, Ltd.) [= *P. kichanensis*, Franch.]
- Primula coerulea*.** (*N. B. G. Edinb.* iv. 221, t. 34; *J. R. H. S.* xxxix. 147.) *H.* Plant 2-3 in. high. Leaves petiolate, ovate or ovate-elliptic, $1\frac{1}{2}$ -4 $\frac{1}{2}$ in. long. Scape 2-3 in. high, more or less woolly, 1- or sometimes 2-flowered. Corolla rich purplish-blue, with the eye and tube yellowish-green; limb 1-1 $\frac{1}{2}$ in. across. Yunnan, China. (Bees, Ltd.)
- **Primula denticulata superba*.** (*G. C.* 1914, lv. 291.) *H.* "A greatly improved variety, which is more floriferous and more richly coloured than the type." (Cocker & Sons.)
- **Primula dryadifolia*.** (*G. C.* 1914, lv. 364; *N. B. G. Edinb.* vii. 37.) *H.* Plant 1-2 $\frac{1}{2}$ in. high. Leaves petiolate, broadly ovate, crenate, $3\frac{1}{2}$ -4 $\frac{1}{2}$ lin. long, 2 $\frac{1}{2}$ -3 lin. broad, densely farinose beneath. Scape thick, 1-3-flowered. Flowers bright rose-red, non-fragrant. Corolla-tube narrowly funnel-shaped, scarcely longer than the calyx; limb up to 1 $\frac{1}{2}$ in. across. South-West China and South-East Tibet. (Edinburgh B. G.) [Syn. *P. congestifolia*, Forrest in *N. B. G. Edinb.* iv. 226, t. 28A.]
- **Primula elongata*.** (*Gard.* 1914, 400.) *H.* Resembles *P. sikkimensis* in its smooth leaves, but it differs in the elongated corolla-tube. Corolla yellow, very delicate; lobes smooth and veined. Himalaya. (J. Mac-Watt.)
- **Primula Giraldiana*.** (*J. R. H. S.* xxxix. 152, f. 54.) *H.* The correct name of the plant included in the list of 1907 as *P. muscarioides*.
- Primula helodoxa*.** (*J. of H.* 1914, lxviii. 103; *Gard.* 1914, 119.) *H.* "Bears handsome whorls of deep yellow flowers in tiers one above another." South-West China? (J. C. Williams.)
- **Primula heucherifolia*.** (*J. R. H. S.* xxxix. 144.) *H.* The correct name of the plant included in the list of 1911 as *P. Gagnepainii*.
- Primula kichanensis*.** See *P. Clementinae*.
- Primula malacoides rosea*.** (*Haage & Schmidt, Cat.* 1914, 197.) *G.* Flowers rose-coloured. (Haage & Schmidt.)
- Primula microdonta*.** (*J. R. H. S.* xxxix. 159.) *H.* Very similar to *P. sikkimensis*, but easily distinguished by the suborbicular-ovate irregularly toothed leaves, which are glabrescent and have a petiole as long as the limb. The corolla is at least twice as large as the calyx, and is deep

yellow, elegantly veined. See *Bulletin de l'Herbier Boissier*, 2me sér. vii. 526, f. Western China. (Bees, Ltd.)

***Primula modesta.** (*J. R. H. S.* xxxix. 176, f. 85; *Gard.* 1914, 280.) H. Closely allied to *P. farinosa*, of which it may be a subspecies. It has a golden instead of silvery farina, and the flowers are purplish. Japan. (Edinburgh B. G.)

Primula nessensis. (*Gard.* 1914, 119.) H. Another name for the plant distributed as *P. farinosa* Beesii and *P. pseudodenticulata*. (Bees, Ltd.)

Primula oblanceolata. (*G. C.* 1914, lvi. 142.) H. A new species which, with two others, has been called *P. angustidens*. It is closely allied to *P. Poissonii*, and is characterised as follows:—Plant not aromatic. Leaves long, narrow, flat. Corolla-tube white; limb flat. China. (Bees, Ltd.)

Primula oculata. (*J. R. H. S.* xxxix. 144.) H. Belongs to the section *Geranioides*, and is allied to *P. septemloba*. It has *Geranium*-like leaves and red-purple drooping flowers, darker than in other Chinese species of the section. Western China. (J. Veitch & Sons; introduced in 1904, but probably not now in cultivation.)

Primula pseudomalacoides. (*J. R. H. S.* xxxix. 149.) G. Very similar to *P. malacoides*, but it is in every way a more delicate plant, and does not readily seed unless cross-pollinated. Yunnan, China. (Bees, Ltd.)

***Primula pseudosikkimensis.** (*J. R. H. S.* xxxix. 159, f. 64.) G. Differs from *P. sikkimensis* in its shorter leaves and larger flowers. Yunnan, China. (Bees, Ltd.)

***Primula redolens.** (*G. C.* 1914, lv. 224.) H. A species of the section *Suffruticosae*, resembling *P. Forrestii* in foliage, but this in *P. redolens* is softer and more hairy. Scape stout, 6-9 in. high. Umbel 12-20, flowered. Flowers white to pale pink, sometimes splashed with purple, all with a small yellow eye. Western China. (Bees, Ltd.; Edinburgh B. G.)

Primula septemloba. (*J. R. H. S.* xxxix. 144, f. 46; *Gard.* 1914, 119.) H. Belongs to the section *Geranioides*. It is a graceful plant with leaves lobed like those of a *Geranium*, and red-purple drooping flowers in an umbel borne on a scape much

longer than the leaves. Western China. (Bees, Ltd.)

***Primula sinolisteri.** (*J. R. H. S.* xxxix. 142, f. 45; *Gard.* 1914, 119.) G. A microform of *P. obconica*, but it has not the irritant hairs of that species. It is a free-grower, forming compact masses of dark green acutely lobed leaves, and produces many umbels of white or sometimes lilac flowers. It has been distributed as *P. Listeri*, from which it is distinct. Yunnan, China. (Bees, Ltd.)

Primula sinomollis. (*J. R. H. S.* xxxix. 145, f. 48.) G. A species of the *Mollis* section. It has petiolate grey-hairy rounded leaves and long scapes bearing superposed whorls of red flowers. Calyx cup-shaped to campanulate, ribbed, with straight erect lobes. Yunnan, China. (J. C. Williams.)

Primula sphaerocephala. (*Gard.* 1914, 93.) H. Similar to *P. capitata*, having small globular heads of purple-blue flowers. South-West China. (Edinburgh B. G.)

***Primula umbrella.** (*J. R. H. S.* xxxix. 164, f. 72.) H. Resembles *P. Clementinae* (*P. kichanensis*) in many points, but has a shorter scape and a calyx with long sharp lobes. The plant is farinose, and produces an umbel of 5 or 6 lilac-purple flowers. Yunnan, China. (Bees, Ltd.)

***Prunus Conradinae.** (*Pl. Wils.* i. 211, 233; *G. C.* 1914, lv. 345.) Rosaceae. H. A new species of the section *Pseudocerasus*. It forms a graceful tree, with rather thin shoots and large leaves. The branches of the current year and the petioles are glabrous. Flowers pink. Petals about $\frac{1}{2}$ in. long, emarginate-bilobed. Style glabrous. Central China. (Arnold Arboretum; Hon. Vicary Gibbs.)

***Prunus microlepis**, var. *Smithii*. (*K. B.* 1914, 51.) H. This has been in cultivation during the last 3 or 4 years under the erroneous name of *P. Miqueliana*. It is a small deciduous tree, with ovate to ovate-lanceolate serrate leaves, $1\frac{1}{2}$ - $3\frac{1}{2}$ in. long, and pale pink flowers, 1 in. across, remarkable in having 10-15 petals. Japan. (T. Smith, Newry.)

Prunus pilosiuscula, var. *media*. (*Pl. Wils.* i. 204; *G. C.* 1914, lv. 345.) H. A free-flowering shrub or tree. Leaves obovate or obovate-oblong, 2- $3\frac{1}{2}$ in. long, $\frac{3}{4}$ - $1\frac{1}{2}$ in. broad, acuminate, sharply toothed. Petiole

$\frac{1}{2}$ – $\frac{1}{2}$ in. long. Flowers solitary or 2 or 3 together, appearing with the leaves, pink. Petals oval, $4\frac{1}{2}$ lin. long. It differs from the type in the hairs on the midrib and nerves of the underside of the leaves. Central China. (Arnold Arboretum; Hon. Vicary Gibbs.)

Pteris flabellata plumosa. (G. C. 1914, lv. 363; G. M. 1914, 434.) Filices. S. A form in which the fronds are often beautifully plumose. (H. B. May & Sons.)

****Pyrus Meinichii.*** (Bean, T. & S. ii. 277.) Rosaceae. H. Intermediate between *P. Aucuparia* and *P. pinatifida*, and probably a seedling from the latter. Introduced about 1904. Norway. (Earl of Ducie.)

****Quercus Schneckii.*** (Bean, T. & S. ii. 324.) Cupuliferae. H. A deciduous species sometimes reaching a height of 200 ft. Leaves 6–8 in. long, obovate, 5- or 7-lobed, dark glossy green and glabrous above, at first covered beneath with loose stellate hairs, afterwards glabrous except for tufts of hairs in the vein-axils. Acorns ovoid, up to 1 in. long. Southern and Central United States. Syn. *Q. texana*, Sargent, not Buckley. (Kew.)

Quercus semecarpifolia. (J. R. H. S. xl. 78, f. 26.) H. A tree sometimes reaching 100 ft. high. Leaves almost sessile, usually elliptic, prickly-toothed, often about 3 in. long and 2 in. broad, lasting till a month or two before the new ones appear. Acorns solitary or in pairs, ripening in the second year. Cupule hemispherical, about $\frac{1}{2}$ in. across, covered with closely appressed tomentose scales. Himalaya and Western China. (J. S. Gamble.)

Quercus vaccinifolia. (Bean, T. & S. ii. 306.) H. Closely allied to *Q. chryssolepis*, of which it is sometimes regarded as a variety. A shrub up to 4 ft. high, with small oval mostly entire leaves, covered beneath with a pale grey scurf. Introduced in 1909. Oregon and California.

Renanthera pulchella. (K. B. 1914, 213; G. M. 1914, 574.) Orchidaceae. S. A new species with a general resemblance to *R. imschootiana*, but its flowers are only about half the size and are different in structure. They are yellow, with the side lobes of the lip and the upper half of the petals crimson. Burma. (A. A. Peeters & Co., Brussels.)

Rhododendron Barclayi. (G. C. 1914, lv. 191.) Ericaceae. H. Garden hybrid between *R. Aucklandii* and *R. Thomsonii*. (R. Fox.)

Rhododendron burmanicum. (K. B. 1914, 185.) G. Distinguished from *R. formosum* by the leaves being very densely scaly on the upper side. Leaves oblanceolate or subobovate-oblanceolate, $2\frac{1}{2}$ – $3\frac{1}{2}$ in. long, up to $1\frac{1}{4}$ in. broad. Flowers terminal, 5 or 6 together, greenish-white, very sweet-scented. Mount Victoria, Burma. (Glasnevin B. G.)

****Rhododendron crassum.*** (K. B. 1914, 201.) H.? Very closely allied to *R. Maddeni*, differing from the typical form of that species by its larger calyx-lobes. Its flowers are creamy white to rosy white, funnel-shaped, 3 in. long, 4 to 7 together in a terminal cluster. South-Western China. (Bees, Ltd.)

****Rhododendron discolor.*** (K. B. 1914, 383; Bean, T. & S. ii. 353.) H. A vigorous growing plant, sometimes 20 ft. high. Leaves oblong, 8 in. long, $2\frac{1}{2}$ in. broad; petiole purple, stout, up to $1\frac{1}{2}$ in. long. Corolla funnel-shaped, 6- or 7-lobed, $2\frac{1}{2}$ –3 in. across, white tinged with pink or sometimes distinctly rosy pink. Stamens 12 or 14. Similar to *R. Fortunei*, but the leaves are cuneate, not cordate, at the base, and the margins of the calyx are ciliate. Central China. (J. Veitch & Sons.)

****Rhododendron Faberi.*** (K. B. 1914, 384.) H. A distinct species, reaching a height of about 20 ft. Young shoots covered with a brown rather loose felt. Leaves hard and stiff, ovate-oblong to oval, 3–8 in. long, 1–4 in. broad, glabrous above, at first reddish-tomentose beneath, afterwards almost glabrous; petiole $\frac{1}{2}$ –1 in. long, brown-tomentose. Flowers 6–12, in trusses 3 in. across. Corolla campanulate, $1\frac{1}{2}$ –2 in. across, white or white spotted with red. Western China. (J. Veitch & Sons.)

****Rhododendron fastigiatum.*** (G. C. 1914, lv. 257; G. M. 1914, 290; K. B. 1914, 51.) H. A very dwarf plant, allied to *R. intricatum*, flowering when only 4 in. high. Leaves closely crowded, overlapping, ovate, $\frac{1}{2}$ – $\frac{3}{4}$ in. long, $\frac{1}{4}$ – $\frac{1}{2}$ in. broad, covered with rusty dots. Flowers bright lilac-rose, $\frac{1}{2}$ –1 in. across, in 4–5-flowered terminal heads. Western China. (G. Reuthe; J. C. Williams.)

****Rhododendron grande x niveum.*** (G. C. 1914, lv. 239.) G. Garden hybrid. (Kew.)

***Rhododendron Hanceanum.** (Bean, *T. & S.* ii. 360; *K. B.* 1914, 202, t.) H. An evergreen shrub up to 10 ft. high. Leaves oblanceolate to narrowly obovate, $\frac{3}{4}$ -4 in. long, $\frac{1}{4}$ -1 $\frac{1}{2}$ in. broad, dark green and somewhat scaly above, pale and freely sprinkled with small scales beneath. Flowers numerous in 1 or 2 terminal clusters. Calyx conspicuous, deeply lobed, scaly. Corolla about 1 in. long, deeply lobed, white to clear yellow. Western China. (Arnold Arboretum.)

***Rhododendron Houlstonii.** (Bean, *T. & S.* ii. 361.) H. Closely allied to *R. Fortunei*, which it resembles in its glabrous leaves, purple petioles, and 7-lobed corolla, but it differs in having a glandular-hairy ovary and style. Flowers flesh-pink, about 3 in. across. Central China. Syn. *R. Fortunei*, var. *Houlstonii*, Rehd. & Wils. (J. Veitch & Sons.)

***Rhododendron Lilianii.** (*G. C.* 1914, lv. 191; *G. M.* 1914, 210, f.) H. Garden hybrid between *R. arboreum* and *R. Shilsonian.* (*R. Fox*; *R. Gill & Sons.*) [= *R. Cornubia*. See *G. C.* 1914, lv. 238.]

***Rhododendron rotundifolium.** (Bean, *T. & S.* ii. 377; *K. B.* 1914, 204.) H. Very distinct in its nearly orbicular leaves, which are 2-4 in. long, usually not so broad as long. Flowers 8-10 in a terminal truss. Calyx small. Corolla broadly campanulate, 2 in. across, rosy red, 7-lobed. Western China. (J. Veitch & Sons.)

***Rhododendron Sheltonae.** (Bean, *T. & S.* ii. 379.) H. An evergreen shrub 4-6 ft. high. Leaves oval or ovate, $2\frac{1}{2}$ -4 in. long, 1-1 $\frac{1}{2}$ in. broad, dull green above, pale and rather glaucous beneath, quite glabrous; petiole $\frac{1}{2}$ -1 in. long. Flowers in trusses of 8 or more. Corolla broadly campanulate, 7-lobed, 1 $\frac{1}{4}$ in. across, pink. Western China. (J. Veitch & Sons.)

***Rhododendron strigillosum.** (*K. B.* 1914, 385; Bean, *T. & S.* ii. 381.) H. An evergreen shrub or small tree, up to 20 ft. high, clothed on the young shoots and petioles with stiff whitish gland-tipped bristles $\frac{1}{2}$ in. long. Leaves narrowly oblong-lanceolate, cordate at the base, 3-6 in. long, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. broad, glabrous above, clothed with brown hairs beneath. Flowers campanulate, rich red, 1 $\frac{1}{2}$ in. long and broad. Pedicel, calyx and seed-pod bristly like the branchlets. Western China and Tibet. (J. Veitch & Sons.)

***Rhododendron taliense.** (Bean, *T. & S.* ii. 382.) H. An evergreen shrub up to 10 ft. high. Leaves thick and leathery, oblong to oval, 2-4 in. long, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. broad, dark green and glabrous above, clothed beneath with a close rusty-brown felt; petiole stout, $\frac{1}{2}$ in. long. Flowers 6-12 in a truss. Corolla bluish-white, about 1 $\frac{1}{4}$ in. long and broad. Western China. (J. Veitch & Sons.)

***Rhododendron villosum.** (Bean, *T. & S.* ii. 384.) H. A distinct species on account of the bristles present on its various parts. An evergreen shrub up to 18 ft. high. Leaves ovate or oblong, pointed, 2-3 $\frac{1}{2}$ in. long, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. broad. Flowers in clusters of 3 or more. Corolla 1 $\frac{1}{4}$ in. across, with a funnel-shaped tube and a 5-lobed limb, light to dark purple. Western China. (J. Veitch & Sons.)

Rhododendron violaceum. (*Pl. Wils.* i. 511; *G. C.* 1914, lv. 224.) H. A shrub reaching a height of 4 ft., but sometimes very dwarf and flowers when only 3 or 4 in. high. Leaves similar to those of *R. intricatum*, but more glossy, narrower, and recurved on the margin. Flowers 1-3, terminal, subsessile. Calyx cup-shaped; lobes 5, $\frac{1}{4}$ -1 lin. long. Corolla violet-purple, over 1 in. across, very flat; lobes 5, about $\frac{1}{2}$ in. long. Western China. (Arnold Arboretum; E. J. P. Magor.)

Rhododendron Websterianum. (*Pl. Wils.* i. 511; *R. H.* 1914, 325.) H. A very much branched shrub reaching a height of about 3 ft. Leaves crowded, ovate or elliptic, 3-7 $\frac{1}{2}$ lin. long, 1 $\frac{1}{2}$ -4 $\frac{1}{2}$ lin. broad, greyish-white and densely scaly on the under side. Flowers solitary, rarely 2 or 3 together, terminal. Calyx deeply 5-lobed; lobes 1-2 $\frac{1}{2}$ lin. long. Corolla funnel-shaped, rose-purple, 1-1 $\frac{1}{2}$ in. across. Western China. (Arnold Arboretum; L. Chenault, Orleans.)

***Rhododendron Williamsianum.** (*Pl. Wils.* i. 538; *K. B.* 1914, 205.) H. Belongs to the same group as *R. Souliei*, and is characterised by its slender almost twiggy branchlets, which branch diffusely, and its glandular bristly young shoots, petioles and pedicels. Flowers 3-5 in a terminal cluster. Calyx small. Corolla campanulate, 5-lobed, 1 $\frac{1}{2}$ in. long, 1 $\frac{1}{2}$ in. broad, pale rose, unspotted. Western China. (Arnold Arboretum.)

Rhododendron Willmottiae. (*G. C.* 1914, lv. 319.) H. A small free-flowering plant with bronze-tinted

young leaves and showy white or pale cream-coloured flowers. China. (Miss Willmott.) [= *R. Hanceanum*, Hemsl.]

Rhododendron Wilsonae. (Bean, T. & S. ii. 386.) H. An evergreen shrub up to 6 or 7 ft. high. Leaves narrowly oval or oval-lanceolate, acuminate at the apex, $2\frac{1}{2}$ – $4\frac{1}{2}$ in. long, $1\frac{1}{2}$ in. broad, glabrous; petiole up to $\frac{1}{2}$ in. long. Flowers slightly fragrant, solitary, axillary, 4–6 at the ends of the shoots. Corolla pale purple, about 2 in. across, funnel-shaped at the base, 5-lobed. Central China. (J. Veitch & Sons.)

***Rhododendron Wiltonii.** (Bean, T. & S. ii. 386.) H. An evergreen shrub up to 8 ft. high, characterised by the young shoots, underside of the leaves and the ovary being densely clothed with a pale brown wool, and by the deeply wrinkled leaves, which are obovate, 2– $3\frac{1}{2}$ in. long and $\frac{3}{4}$ – $1\frac{1}{2}$ in. broad. Flowers in a cluster of 6 or more. Corolla pink, campanulate, $1\frac{1}{2}$ in. across, with 5 almost erect lobes. Western China. (J. Veitch & Sons.)

***Rhus Henryi.** (G. C. 1914, lv. 345; Bean, T. & S. ii. 393.) Anacardiaceae. H. A large deciduous shrub or small tree. Leaves pinnate, 10–16 in. long; leaflets 7–11, oblong to oblong-lanceolate, $2\frac{1}{2}$ –5 in. long, $1\frac{1}{2}$ in. broad, entire or sparingly toothed. Flowers small, greenish-white, in terminal pyramidal panicles $3\frac{1}{2}$ –7 in. long. Fruits rich red, downy, about the size of peppercorns. Central and Western China. (Arnold Arboretum; Hon. Vicary Gibbs.) [According to *Pl. Wils.* ii. 177, this is the plant in gardens and included in the list of 1908 as *R. sinica*, and its correct name is *R. Potaninii*, Maxim. The true *R. sinica*, Diels (= *R. punjabensis*, var. *sinica*, Rehd. & Wils.), is now in cultivation. See Bean, T. & S. ii. 393.]

***Ribes Brocklebankii.** (G. C. 1914, lv. 402; G. M. 1914, 477.) Saxifragaceae. H. A sport from *R. sanguineum*. Leaves golden-yellow. (T. Winkworth.) [*R. sanguineum aureum Brocklebankii*; G. C. 1914, lv. 422.]

***Ribes curvatum.** (Bean, T. & S. ii. 401.) H. Closely allied to *R. niveum*, which it resembles in its white flowers and hairy style and stamens, but it differs in the glandular ovary and often glabrous anthers, and it is much dwarfer in habit. The plant is armed with slender simple or triple spines, and has roundish 3–5-lobed

leaves, usually 1 in. or less across. South-Eastern United States. (Arnold Arboretum; Kew.)

Ribes Henryi. (G. C. 1914, lvi. 29.) H. A dioecious species resembling *R. laurifolium*, being spineless and having persistent entire leathery leaves, but it is viscid, and the fruit is green, glandular and hispid. Western China. (Edinburgh B. G.)

***Ribes montigenum.** (Bean, T. & S. ii. 403.) H. Intermediate between the sections *Grossularia* and *Ribesia*, and allied to *R. lacustre*, but it has shorter racemes of only 6–10 flowers, and bright red fruits. Western North America. (Kew.)

Ribes wollense. (K. B. 1914, 49, 382, foot-note, t.; G. C. 1914, lv. 406.) H. The name given to a plant supposed to be a hybrid between *R. nigrum* and *R. Grossularia*, but since identified with the North American *R. divaricatum*, Dougl. (W. J. Bell.)

***Romanzoffia unalaschcensis.** (G. C. 1914, lv. 411, as *R. unalascensis*.) Hydrophyllaceae. H. A small plant with smooth leaves and white flowers, closely resembling some of the Saxifragas. Unalaska and neighbouring islands. (S. Arnott.)

***Rosa corymbulosa.** (B. M. t. 8566.) Rosaceae. H. A distinct new species with unarmed or sparingly prickly branches and numerous small flowers in corymb-like inflorescences. Flowers $\frac{3}{4}$ –1 in. across. Petals broadly obcordate, deep rose above, white at the base. Fruits globose, glandular, about $\frac{1}{2}$ in. long, crowned by the persistent sepals. Central China. (Arnold Arboretum; Kew.)

Roscoea alpina. (Gard. 1914, 159.) Scitamineae. H. A very hardy free-growing plant with fine purple flowers. Himalayas. (Bees, Ltd.)

***Rubus Lambertianus**, var. **glaber.** (Bean, T. & S. ii. 462.) Rosaceae. H. Differs from the type in having round stems, which like the leaves are smooth or nearly so, and yellow instead of red fruits. China and Japan. (Arnold Arboretum.)

***Rubus malifolius.** (Bean, T. & S. ii. 463.) H. Stems prostrate or climbing, sparingly armed with short recurved prickles. Leaves oval or ovate, 2–5 in. long, 1–2 in. broad, broadly and shallowly toothed. Flowers 1 in. across, in terminal racemes 2–4 in. long. Fruits rather large, black, of an unpleasant flavour.

An elegant species with handsome flowers. Western China. (Arnold Arboretum.)

***Rubus trianthus.** (Bean, T. & S. ii. 469.) H. A deciduous shrub of wide-spreading habit, differing from most species in being quite glabrous. Stems erect, much branched, prickly, blue-white, 4-6 ft. high. Leaves ovate to triangular, more or less 3-lobed, 3-6 in. long, $1\frac{1}{2}$ - $\frac{2}{3}$ in. broad. Flowers pinkish-white, insignificant. Fruit dark red. Central China. (J. Veitch & Sons.)

***Salix Pierotii.** (Bean, T. & S. ii. 487.) Salicaceae. H. A compact much branched shrub up to 6 or 8 ft. high. Leaves rather crowded, lanceolate, finely and regularly toothed, 2-5 in. long, $\frac{1}{2}$ - $1\frac{1}{2}$ in. broad, brilliant deep green and soon quite glabrous above, vivid blue-white and at first somewhat silky beneath, later glabrous; petiole $\frac{1}{2}$ - $\frac{1}{2}$ in. long. Catkins leafy at the base, 1-2 in. long. Stamens solitary, rarely 2. Introduced about 1903. Japan.

Salvia longistyla. (B. M. t. 8590.) Labiatae. G. Plant reaching a height of 14 or 15 ft. Leaves petiolate, cordate-ovate, 3-5 $\frac{1}{2}$ in. long, 2-4 $\frac{1}{2}$ in. broad. Racemes 15-25 in. long. Flowers 8-16 in each whorl. Corolla long-exserted, red-pink, rather more than 1 in. long. A re-introduction; it was in cultivation first about 1833. Syns. *S. rectiflora*, Vis., *S. aristulata*, Mart. & Gal. Mexico. (Dr. Robertson-Proschowsky, Nice.)

***Sansevieria intermedia.** (K. B. 1914, 83.) Liliaceae. S. A new species very similar to *S. cylindrica*, but the leaves are channelled, the edges of the channel being acute below and obtusely rounded above. British East Africa. (Kew.)

***Saponaria ocymoides alba.** (R. H. 1914, 334; J. H. F. 1914, 384.) Caryophyllaceae. H. A form with pure white flowers which may be propagated true from seeds. It was obtained by crossing a white-flowered but sterile form with *S. ocymoides versicolor*. (Vilmorin-Andrieux & Co., Paris.)

Sarcanthus robustus. (G. C. 1914, lv. 21, f. 12, as *S. robustum*.) Orchidaceae. S. A new species with narrowly oblong leaves about 6 in. long, and a few-flowered spike of cream-white to blush-white flowers marked with claret-purple. Borneo. (Hon. N. C. Rothschild.)

***Sassafras Tzumu.** (Bean, T. & S. ii. 501.) Lauraceae. H. A tree reaching a height of 50 ft., distinguished from *S. officinale* by some small differences in the structure of the flower, by having glabrous shoots and leaves and a different habit of growth. Central China. (Kew.)

Saxifraga cinerascens. (N. B. G. Edinb. v. 142, t. 98; G. C. 1914, lv. 15.) Saxifragaceae. H. ? A densely tufted plant 2-4 in. high, with few-leaved 1-3-flowered stems, covered in the lower part with black glandular hairs. Basal leaves linear-lanceolate, 3 $\frac{1}{2}$ -5 lin. long, horny on the margin, loosely ciliate, bristle-pointed. Flowers golden-yellow. Yunnan, China. (Edinburgh B. G.)

Sedum Cockerellii. (G. C. 1914, lv. 67.) Crassulaceae. H. ? A small not very conspicuous species with white petals and bright pink styles. New Mexico. (T. D. A. Cockerell, Boulder, Colorado, U.S.A.)

***Sedum rariflorum.** (K. B. 1914, 208.) H. Allied to *S. algidum*, but well distinguished by the loosely-branched stems, 1-flowered branchlets, spreading sepals, and somewhat bristly-pointed petals, which are white, oblong-lanceolate, and nearly $\frac{1}{2}$ in. long. North China. (Kew.)

***Sempervivum ciliosum.** (K. B. 1914, 379.) Crassulaceae. H. A new species related to *S. Braunii*, but it is easily distinguished by the much denser rosettes almost flat at the apex, and the distinctly longer hairs of the leaves. Country not recorded. (Kew; Cambridge B. G.)

Senecio Purdomii. (K. B. 1914, 327.) Compositae. H. Stem erect, round, densely yellow-pubescent. Leaves radical, broadly orbicular, cordate at the base, regularly toothed, about 1 ft. long and $1\frac{1}{4}$ ft. broad; petiole long. Inflorescence paniculate; branches densely tawny-pubescent. Flower-heads obconical, up to $\frac{3}{4}$ in. long, about $\frac{1}{2}$ in. across. Florets all tubular. North-West China. (J. Veitch & Sons.)

Sinomenium acutum, var. **cinereum.** (Pl. Wils. i. 387; G. C. 1914, lv. 373.) Menispermaceae. H. A pretty climbing plant with shining green leaves and stems. Flowers inconspicuous. It differs from the typical form in having the leaves pilose above, then glabrescent, and softly pilose and glaucous beneath. Syn. *Cocculus diversifolius*, var. *cinereus*, Diels.

- Central China. (Arnold Arboretum; Hon. Vicary Gibbs.)
- Smilacina paniculata.** (*B. M. t.* 8539.) Liliaceae. G. A glabrous erect herb. Leaves ovate-lanceolate, long-acuminate, 5-6 in. long, $1\frac{1}{2}$ in. broad above the base. Panicle terminal, $2\frac{1}{2}$ in. long and broad, altogether snowy white. Flowers about $1\frac{1}{2}$ in. across. Guatemala and Southern Mexico. (F. Sander & Sons.)
- Smilax Sieboldii.** (*Bean, T. & S. ii.* 518.) Liliaceae. H. A deciduous or semi-evergreen species. Stems round or somewhat ribbed, more or less armed with slender prickles. Leaves ovate, cordate at the base, $1\frac{1}{2}$ -3 in. long. Flowers green, 4-7 in small umbels. Introduced in 1908 or before. Japan and South China.
- Sophr-laelio-cattleya Herbertii.** (*G. C.* 1914, lv. 201.) Orchidaceae. G. Garden hybrid between *Sophr-laelia heatonensis* and *Cattleya F. W. Wigan.* (H. S. Goodson.)
- Spathoglottis pulchra.** (*O. R.* 1914, 17.) Orchidaceae. S. A plant with this name is in cultivation, but no description is given, and it is uncertain whether it is *S. pulchra*, Schlechter, from the Bismarck Archipelago. (Edinburgh B. G.)
- *Stapelia Leendertziae.** (*B. M. t.* 8561.) Asclepiadaceae. G. A remarkable species, differing from all other *Stapelias* except *S. nobilis* in having a campanulate corolla with a distinct tube, 2- $2\frac{1}{2}$ in. long, instead of a flat saucer-shaped one. The corolla is dull dark purple, shortly hairy outside and furnished with long purple hairs inside. Transvaal. (W. E. Ledger; Kew.)
- *Stewartia monadelphica.** (*Bean, T. & S. ii.* 553.) Ternstroemiaceae. H. A deciduous shrub or small tree. Young shoots at first clothed with fine hairs. Leaves oval or ovate-oblong, $1\frac{1}{2}$ -4 in. long, $\frac{3}{4}$ - $1\frac{1}{2}$ in. broad, at first hairy on both sides, becoming almost glabrous; petiole $\frac{1}{2}$ - $\frac{1}{2}$ in. long. Flowers solitary and axillary, 1- $1\frac{1}{2}$ in. across, white, fragrant. Distinguished from *S. Pseudo-camellia* by the hairy shoots and leaves. China and Japan. (J. Veitch & Sons.)
- *Streptocarpus Banksii.** (*G. C.* 1914, lvi. 192, f. 75.) Gesneraceae. G. Garden hybrid between *S. Wendlandii* and a plant of hybrid origin. (Cambridge B. G.)
- Streptocarpus Blythinii.** (*G. C.* 1914, lvi. 258, f. 104.) G. Garden hybrid between *S. Wendlandii* and *S. cyanea.* (Cambridge B. G.)
- *Styrax Veitchiorum.** (*Bean, T. & S. ii.* 560.) Styracaceae. H. Tree 12-15 ft. high, covered on the young shoots, petioles and calyx with a close grey stellate pubescence. Leaves lanceolate, remotely and shallowly toothed, 3-5 in. long, $\frac{3}{4}$ -1 in. broad; petiole $\frac{1}{2}$ - $\frac{1}{2}$ in. long. Flowers white, nearly 1 in. across, forming slender panicles 4-8 in. long at the ends of the current season's growths. Central China. (J. Veitch & Sons.)
- *Syringa alborosea.** (*K. B.* 1914, 187.) Oleaceae. H. Shrub, up to 10 ft. high. Leaves elliptic, 2-4 in. long, 1-2 in. broad, sparingly pubescent on both sides; petiole up to $\frac{3}{4}$ in. long. Inflorescence terminal, erect, 2-5 in. long. Corolla-tube 4-5 lin. long, pale rose; lobes $1\frac{1}{2}$ - $1\frac{1}{2}$ lin. long, ovate, white. China. (J. Veitch & Sons.)
- *Tilia paucicostata.** (*Bean, T. & S. ii.* 594.) Tiliaceae. H. Most closely resembles *T. cordata* in general appearance. It has glabrous young shoots and very obliquely ovate leaves, conspicuously and fairly regularly toothed except at the apex and base, 2- $3\frac{1}{2}$ in. long and $1\frac{1}{2}$ - $2\frac{1}{2}$ in. broad, sometimes much larger. It is believed to be in cultivation under the erroneous name of *T. Miqueliana*, var. *chinensis*. Western China. (J. Veitch & Sons.)
- *Tillandsia Benthamiana**, var. **Andrieuxii.** (*B. M. t.* 8576.) Bromeliaceae. S. A succulent almost stemless herb. Leaves densely clustered, ovate-lanceolate at the base, ensiform-acuminate above, 6 in. long, $\frac{1}{2}$ in. broad at the base. Scape 3-6 in. long. Inflorescence spicate, oblong, 3 in. long. Flowering-bracts ovate with rounded tips, rose-pink, white-scaly, $\frac{3}{4}$ in. long. Flowers $1\frac{1}{2}$ in. long, deep violet. Costa Rica and Mexico. (Kew.)
- *Trichocaulon pictum.** (*B. M. t.* 8579.) Asclepiadaceae. S. Stem subglobose or cylindric-oblong, $1\frac{1}{2}$ -3 in. long, $1\frac{1}{2}$ -2 in. thick, very blunt, sparingly branched at the base, irregularly tubercled. Flowers 2-4 together in fascicles, erect. Corolla $\frac{1}{2}$ in. across, whitish but marked with many close-set purple dots and short streaks. Coronas yellowish and purple. Little Namaqualand. (Kew.)

***Trillium rivale.** (*G. C.* 1914, lv. 224.)

Liliaceae. H. A very small species having stems only about 3 in. high. Rootstock creeping. Flowers erect, cup-shaped, about 1 in. across, white, richly dotted with rose. The 3 bracts are stalked and are borne about 2 in. below the flower. Western North America. (J. Box.)

***Ulmus Shirasawana.** (*B. S. D. F.*

1914, 27, ff.) Urticaceae. H. A new species in cultivation as *U. parvifolia*. Its distinguishing characters are: Leaves deciduous, ovate or ovate-lanceolate, crenate-dentate, with fewer (8-10) pairs of bifurcate nerves. Flowers greenish or yellowish-white. Fruit distinctly stalked, abruptly contracted at the apex into a beak. Japan. (P. L. de Vilmorin, Verrières-le-Buisson, France; Kew.)

Ulmus Sieboldii. (*B. S. D. F.* 1914,

26, ff.) H. This has been confused with *U. parvifolia*, from which it differs in the more prominent teeth of its ovate or ovate-lanceolate deciduous leaves, which have small tufts of hairs in the axils of the principal veins beneath, in having a yellowish instead of red perianth and a fruit twice as large, with a much longer stalk. Syn. *U. japonica*, Siebold, not of Sargent. Japan. (Montpellier B. G.; Arboretum Segrezi-anum, etc.)

Vanda coerulea Rogersii. (*O. R.*

1914, 31.) Orchidaceae. S. "A distinct, nearly white variety, with flowers of moderate size and an unusually long spur." (*O. O.* Wrigley.)

Vanda coerulescens, var. Hennis-

ana. (*Orchis*, 1914, 83.) S. Flowers similar in colour to those of *V. coerulea*, with a dark blue lip which is scarcely lobed in front, and a slender spur about $\frac{1}{2}$ in. long. (W. Hennis, Hildesheim, Germany.)

Vanda Lowii, var. Le Moinierii. (*R.*

H. B. 1914, 29, f.) S. In this variety the first flowers are dull yellow, marked with numerous large purple-brown spots; the other flowers have numerous brown-red almost round sometimes confluent blotches on a somewhat greenish-yellow ground. (R. Le Moinier, St. Maurice, Lille, France.) [*Arachnanthe Lowii*, var.]

Vanda striata. (*O. R.* 1914, 220.) G.

Allied to *V. cristata*, from which it differs in its smaller flowers and the

more obtuse spur of the lip. A re-introduction; it was in cultivation in 1874. North-West Himalaya. (R. R. D. Troup.)

Veronica gigantea. (*Bean, T. & S.*

ii. 639.) Scrophulariaceae. H. A tree sometimes 25 ft. high, forming a well-defined trunk. Leaves 2-4 in. long, $\frac{1}{4}$ - $\frac{1}{2}$ in. broad, minutely hairy on the margins. Racemes about as long as the leaves. Flowers white, 1-5 in. across. Corolla-tube about as long as the calyx. Syn. *V. salicifolia*, var. *gigantea*, Cheeseman. Chatham Islands. (Captain A. A. Dorrien Smith.)

***Viburnum kansuense.** (*Bean, T. &*

S. ii. 651.) Caprifoliaceae. H. A deciduous shrub 4-8 ft. high, belonging to the *Opulus* group, but it is distinct in having no showy sterile flowers, and the leaves are frequently small and deeply lobed, suggesting a small maple leaf. Western China. (Arnold Arboretum.)

Vitis armata, var. cyanocarpa. (*Pl.*

Wils. i. 104; *G. C.* 1914, lv. 373.) Ampelidaceae. H. Differs from the type in having fewer prickles or sometimes almost none on the branches of the current year. It is possibly the same as the plant in cultivation under the varietal name *Veitchii*. Central China. (Arnold Arboretum; Hon. Vicary Gibbs.)

Vitis himalayana, var. rubrifolia.

(*G. C.* 1914, lv. 373.) H. A clinging variety with dark purple leaves having silver-white veins. Western China. (Arnold Arboretum; Hon. Vicary Gibbs.) [= *Parthenocissus himalayana*, var. *rubrifolia*, Gagnep. in *Pl. Wils.* i. 101.]

Xanthorrhoea undulatifolia. (*B. T.*

O. 1914, 193.) Juncaceae. G. The specimen described has a trunk about 8 ft. high and 12 in. in diameter. Leaves in a large elegant crown, fragile, sword-shaped, reflexed, rhomboidal in section, 5 ft. long. Scape quite erect, cylindric, about 12 ft. long, with a dense spike of golden-yellow flowers. Australia. (Palermo B. G.)

Xylosma Aquifolium. (*K. B.* 1914,

151.) Bixaceae. S. ? A plant with holly-like leaves, which have a pair of glands at the base of the blade, and short axillary racemes of very small flowers. Country unknown. (Melbourne B. G.)

***Zephyranthes cardinalis.** (*B. M.* t. 8553.) Amaryllidaceae. H.H. A new species allied to *Z. concolor*, from which it differs in the shorter pedicel, shorter narrowly tubular spathe and bright red perianth. Pedicel $\frac{3}{4}$ in. long. Spathe $\frac{3}{4}$ in. long. Perianth-tube funnel-shaped, 1 in. long; segments broadly oblong-ob lanceolate. America (country not known). Cultivated in Bahama Islands. (Kew.)

Zygopetalum Blackii. (*G. C.* 1914, lvi. 283; *O. W.* v. 41.) Orchidaceae.

G. Garden hybrid between *Z. crinitum* and *Z. Perrenoudii*. (Flory & Black.)

***Zygopetalum Prainianum.** (*K. B.* 1914, 376; *O. R.* 1914, 317; *B. M.* t. 8610.) G. Similar to *Z. Burkei*, but it has longer pseudobulbs, broader leaves, and differently coloured flowers. Sepals and petals dusky brown, with obscure green stripes on the petals. Lip white, streaked with rose-purple on the fleshy ribs of the callus. Peru. (F. Sander & Sons.)